

# **CHEMOSPHERE**

## **SUBJECT AND AUTHOR INDEX**

**Volume 16, 1987**



Pergamon Press: Oxford New York  
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# SUBJECT INDEX 1987

## Corrigendum

Bargagli R., Barghigianai C. and Maserti B.E.: **15**, 1035 (1986): on p.1039 Fig 1 should be followed by text on p.1040 and Fig2 on p.1040 should be followed by text on p.1039, the corrected form is published, 3 Bennett W.E., Maas J.L., Sweeney S.A.S. and Kagan J.: **15**, 781 (1986): the page that should have appeared after p.782 is reproduced, 5 Hemming J., Reunahan M. and Kronberg L.: **15**, 549 (1986): reference to synthesis of synthetic mutagen provided, 6 Hoff R.M. and Chan K.-W.: **15**, 449 (1986): unit conversion error on p.451 and total flux to Arctic ocean corrected, 6 Kuehl D.W., Cook P.M., Battermann A.R., Lothenbach D. and Butterworth B.C.: **16**, 667 (1987): correction to Table 7, 1327

## Absorption

effluents, dye-containing, colour removal by bentonites, 2523

## Accumulation

tissue, and enhanced toxicity of 1,2,4,5-isomer of tetrachlorobenzene not related to its lipophilicity, 803

## Adsorption

south Swedish soils, changes in acidity and cation pools between 1949 and 1985, 2239

aminotris(methylene phosphonate), environmental fate, degradability, sludge adsorption, mobility in soils and bioconcentration, 1323 chloridazone by montmorillonite, 937 hydrophobic chemicals from water, hypothesis for mechanism of particle concentration effect, 745 onto activated C and neutron activation analysis, analysis of total organic Cl- and Br-compounds

in water samples, 969 phenol onto silstone, effect of solution factors, 1431

## Aerosols

atmospheric-, identification of C<sub>6</sub>-C<sub>1</sub>,  $\gamma$ -lactones, 1143

## Agriculture

soft tissue sarcomas, mortality among agricultural workers, 2101 soft tissue sarcoma risk among agricultural and forestry workers in Sweden, 2107

## Alcohols

and ketones and alicyclic compds, biodegradability-quantitative structure relationships, 695 octanol-water partition coeffs using reverse phase high pressure liquid chromatography, 133

## Algae

and fish, exact mass measurement of organoarsenic compds using fast atom bombardment mass spectrometry, 91 concentration factors in activated sludge, algae and fish, environmental hazard profile of <sup>14</sup>C labelled organic compds tested, 589

*Hylocomium splendens*, elemental composition, 2531

*Scenedesmus obliquus*, naphthalenesulphonic acids as source of sulphur, 1565

## Amines

aminotris(methylene phosphonate), degradability, sludge adsorption, mobility in soils and bioconcentration, 1323 chloroaniline, effect on plankton in freshwater systems, 581 cyanogen chloride, formation in reaction of monochlorinated, mononitrated or monoacetylated benzenes, phenols and anilines with chloramine and polymethylphenols, polychlorophenols and polynitrophenols with chloramine, 2249

## Analysis

2,3,7,8-TCDD and PCDDs, evaluation in fly ash from refuse incinerators, 1865

2,3,7,8-TCDD, detn in human adipose tissue on whole weight and lipid bases, 935

2,3,7,8-TCDD, estimation of human exposure, 1851

a QSAR, Ah receptor binding of substituted aryl hydrocarbons, 1719

atmospheric levels of chlorinated organic compds, 1781

atrazine in underground waters in parts per trillion levels, early warning method for contamination and soil distribution, 1425

biotransformation kinetics of xenobiotics in natural waters by aufwuchs communities, 49

brominated flame retardants, pyrolysis and GC/MS in on-line operation, 1353

C<sub>6</sub>-C<sub>1</sub>,  $\gamma$ -lactones, identification in atmospheric aerosols, 1143

cars run on leaded petrol, polychlorinated dibenzofurans and dioxins in exhaust fumes, 29

chain-saw exhaust, new strategy for monitoring exposure, 99

CIR-FIR interfacial-, photo-catalytic degradation of toxic organic compds on TiO<sub>2</sub>, aqueous suspensions, 1447

criteria for choosing a least squares procedure to extract parameters from exponential decays, 79

dioxins and related compds from municipal incinerators in Japan, 1901

environmental technology, ion flotation, 623

halogenated polycyclic aromatic hydrocarbons in air, snow and automobile exhaust, 2441

human fat sampling for dioxin, 2063

*in vitro* induction of AHH by 2,3,7,8-TCDD and related toxic halogenated aryl hydrocarbons in rat hepatoma cells for quantitative detn of toxins, 791 isomerspecific-, of pentachlorophenol and sodium

pentachlorophenate for 2,3,7,8-substituted PCDD and PCDF at sub-ppt levels, 1759

levels of polychlorinated quaterphenyl congeners in adipose tissue of normal subjects, 1419

metal fallout, perennial herbs as monitors, 233

methyl parathion, biotic and abiotic degradation rates in fresh water, estuarine water and sediment, 1509

new, by high resolution emission spectroscopy, aromatic polycyclic hydrocarbons in environmental samples, 485

of deaths among patients with Yusho, 2085

organic chemicals, release into air, water and soil, 117

PCB congener-, critical evaluation of toxic levels in biota, 2585

PCBs in human adipose tissue by NCI mass spectrometry and PCBPs synthesis, structural characteristics of 2,3,6,7-TCBP, 2057

PCDD and PCDF in motor oils and waste oils, 1649

polychlorinated biphenyl residues in fish and shellfish in Tapei, 1835

polychlorinated dibenzo-p-dioxins and dibenzofurans, detn of isomers from incinerators, related samples in Japan, 1959

refined-, to detect and measure PCDD/PCDF, PAH, PCB, CP and CP in environmental samples, 1619

selective and sensitive-, of nitro-PAH, 945

TCDD levels in human adipose tissue distribution, statistical evaluations reflect misleading interpretations, 2135

total organic Cl- and Br-compds in water samples, adsorption onto activated C and neutron activation analysis, 969

toxicity of alkylating agents, alternative for nitro-benzenylpyridine test, 2365

tributyltin chloride present in sea water, solid phase extraction, GC separation and EC detection, 61

**Animals see also Fish**

animal exposure to TCDD contaminated soil, potential residues in derived foods, 2123

animal toxicology and biochemical effects, dioxins and dibenzofurans, recent findings and comments on pharmacokinetics, 2191

biota, critical evaluation of toxic levels, PCB congener analysis, 2585

C57BL/6 and DBA/2 mice, 2,3,7,8-TCDD, AHH induction activity, effect of receptor antagonist, 1,3,6,8-tetrachlorodibenzofuran, 1739

C57BL/6 and DBA/2 mice, 2,3,7,8-TCDD, AHH induction activity, effects of receptor modulators, 1687

cattle and men, environmental Hg, correlation between contamination and leukaemia, 253

feral pigeons, chlorodibenzo-p-dioxins in, 1749

Holstein dairy cows, bioavailability of administered tritiated 2,3,7,8-tetrachlorodibenzo-p-dioxin 1743

mouse hepatoma cells, transmission and scanning microscopic characterisation after treatment with 2,3,7,8-tetrachloro-p-dibenzodioxin, 1713

PCB methyl sulphones and related compds, identification of target cells and tissues in different species, 1671

persistent environmental chemicals, bio-indicators for monitoring the spread, 225

rabbits, effect of sodium fluoride on erythrocyte membrane function, reference to metal ion transport, 1087

rats, mechanism for stimulated fecal excretion of 2,3,4,7,8-pentachlorodibenzofuran by treatment with squalene and liquid paraffin, 1707

rats, poisoning with Ni, effect of chelating drugs on pharmacokinetics and metabolic disposition, 259

rats, presence of PCDDs and PCDFs dependent on vehicle used as carrier, 1193

rats, role of Ah receptor in mediating down regulation of uterine and hepatic estrogen receptor levels, 1691

snails from Pensacola bay, Florida near hazardous-waste site, presence of creosote compds, 2397

trichlorobiphenyl metabolism in different test species, 599

**Anisoles see under Ethers**

**Antibodies**

chlorinated dioxins, immunoassay based on monoclonal antibody and an enzyme linked immunosorbent assay, 1635

PCB methyl sulphones, physico-chemical and immunochemical characterisation of a binding protein, 1677

**Aquatic organisms**

*Daphnia magna*, a predictive structure-toxicity model, 1149

**Aquatic Systems**

aqueous environment, evaluation of 2,4,6-trichlorophenol with mathematical model, 2531

Abu Kir bay, environmental conditions, physicochemical characteristics and water circulation, 361

Abu Kir bay, environmental conditions, plankton distribution from land based effluents, 559

aqueous environment, oxidative photoinduced degradation of silicones, 2567

aqueous microecosystem, method to assess periodic responses to photosynthetic inhibition, 287

natural waters, biotransformation kinetics of xenobiotics by *aufwuchs* communities, 49

eastern Adriatic coast, impact of pollution on copepod community, 369

freshwater, estuarine water and sediment, biotic and abiotic degradation rates of methyl parathion, 1509

freshwater systems, controlled release formulations of pesticides and herbicides, 615

freshwater systems, effect of chloroaniline on plankton, 581

Guadiana river and Guadalquivir estuary, heavy metal pollution, 463

gulf of Iskenderun, long-term impact of dissolved and dispersed hydrocarbons, 381

gulf of Iskenderun, Hg and Sn in, 1445

gulf of Trieste, eastern part, bacteriological contamination due to sewage disposal, 551

hydrocarbon fuel spill dispersion on water, literature review, 1475

Kupa river, yugoslavia, PCBs in water, sediments and fish, 2351

Lake Pontchartrain, Louisiana, heavy metals from municipal runoff to sediments, 2579

Marmara sea, pollutants and problems, 339

Mediterranean beaches of Israel, association between seawater pollution measured by bacterial indicators and morbidity among bathers, 565

Mediterranean sea, spatial and temporal variation of pelagic tar, 399

Mediterranean, coordinated programme for research and monitoring of pollution, 633

natural waters, bisphenol degradation, 1501

natural waters, photoreactivity of humic acid, 523

natural waters, preconcentration of heavy metals with hydrazones supported on silica-gel, 405

northeastern Greece, ecological parameter of surface water, 351

northeastern Mediterranean, tin distribution, 429

photoinduced formation of oxygen species and their reaction with organic chemicals in soln, 505

Po river delta lagoon, trophic state gradients and zooplankton and zoobenthos distribution, 571

polluted stream, sediment physicochemical properties and benthic organisms, effect of high-levels of polycyclic aromatic hydrocarbons, 1053

polybrominated biphenyl ethers in marine fish, shellfish and river and marine sediments, 2389

river Rhone, input of nutrients and suspended matter into Golfe du Lion, 417

rivers and lakes of northern Greece, heavy metal pollution, 455

sea water, tributyltin chloride presence, solid phase extraction, GC separation and EC detection, 61

sorption of hydrophobic chemicals from water, hypothesis for mechanism of particle concentration effect, 745

upper Hudson river, sedimentation of 74 PCB congeners, 733

water systems in northern Greece, correlation of some organic pollution factors, 395

watercourse pollution, sources in Italy and mediterranean France, assessed by macrophytes, 331

Wisconsin river, contaminated sediment, bioavailability of PCDDs and PCDFs to fresh water fish, 667

**Assays see Bioassays**

**Atmosphere**

air, water and soil, release of organic chemicals, 117

conifer needles, organic micropollutants, occurrence and distribution, 2647

environmental measurements with atmospheric Hg monitor having speciation capabilities, 183

erythrocyte membrane, nitrogen dioxide-induced damage, 2371

halogenated polycyclic aromatic hydrocarbons, analysis in air, snow and automobile exhaust, 2441

identification of  $C_{n-}C_{n+}$ ,  $\gamma$ -lactones in atmospheric aerosols, 1143

incinerator testing and evaluation programme, air pollution control technology in Canada, 1923

level of chlorinated organic compds, 1781

mancozeb in air, determination, occupational exposure in control of potato late blight, 2423

PCBs,  $\alpha$ - and  $\gamma$ -hexachloro-cyclohexane, 4,4'-DDE and 4,4'-DDT in Continental air, 2497

PCDDs and PCDFs in air, particulates, sediments and soil, 1775

trichlorofluoromethane, residence time in polyurethane foams, variability, trends and effects of temp, 759

**Automobiles**

halogenated polycyclic aromatic hydrocarbons, analysis in air, snow and automobile exhaust, 2441

PCDD and PCDF in motor oils and waste oils, analysis, 1649

PCDD and PCDF in motor oils, refined oils and contaminated soils, 1847

run on leaded petrol, poly-chlorinated dibenzofurans and dioxins in exhaust fumes, 29

**Bacteria see also Microorganisms**

bacteria, characterisation with phenol-oxidase activity from soil in La Laguna area, Spain, 2627

bacterial indicators, measurement of seawater pollution on Mediterranean beaches of Israel, association with morbidity among bathers, 565

bacteriological contamination, sewage disposal in eastern part of gulf of Trieste, 551

Cd distribution on cells, protective effect of different envelopes, marine bacterial investigation, 2623

**Benzene derivatives see also Hydrocarbons**

chloronitrobenzenes, photo-degradation in aqueous soil in presence of  $TiO_2$ , 809

dichlorobenzene, particulate associated partial combustion products, 973

polychlorobenzenes, environmental photoincorporations of into humic model monomers, 495

tetrachlorobenzene isomers, partition coeffs of between water and sodium dodecylsulphate micelles, enhanced toxicity and tissue accumulation of 1,2,4,5-isomer not related to its lipophilicity, 803

tetrachlorobenzene-related compds, synthesis, characterisation and chromatography, 2467

**Bioaccumulation**

plant foliage, accumulation and release kinetics, exposure to  $\alpha$ - and  $\gamma$ -HCH, p,p'-DDT and DDE and PCB mixture, 2515

**Bioactivity**

and phototoxicity, occurrence and synthesis of phenylheptatriyne, 2405

**Bioassays**

2,3,7,8-TCDD equivalents, validation of *in vitro* bioassays, 1723

chlorinated dioxins, immunoassay based on monoclonal antibody and an enzyme linked immunosorbent assay, 1635

*in vitro* induction of AHH by 2,3,7,8-TCDD and related toxic halogenated aryl hydrocarbons in rat hepatoma cells for quantitative detn of toxins, 791

**Bioavailability**

isomer dependent, of PCDDs and PCDFs from incinerator flyash to fresh water fish, 657

of PCDDs and PCDFs to fresh water fish from contaminated Wisconsin river sediment, 667

of polycyclic aromatic hydrocarbons, from coal-derived solid product, leaching study, 2613

of tritiated 2,3,7,8-tetrachlorobenzene-p-dioxin administered to Holstein dairy cows, 1743

PCDDs and PCDFs in rats dependent on vehicle used as carrier, 1193

**Bioconcentration see also Concentration**

aminotris(methylene phosphonate), degradation, sludge adsorption, mobility in soils and bioconcentration, 1323

and distribution of penta-chlorophenol in different human tissues, 887

bioconcentration kinetics, 1,4,5-tri- and 3,3',4,4'-tetra- and 2,4,5-tri- and 3,3',4,4'-tetrachlorodiphenyl ether in fish, 2379

chloranisoles, uptake and elimination by fish, 953

partition coeffs of n-octanol-water of organic environmental chemicals in humans, correlation with their bioconcentration potential, 239

PCB concentration, relationship to age of striped bass in Hudson river and Long Island sound, 1469

**Biodegradation**

assessment, toxicity evaluation of substances, 2259

biodegradability-quantitative structure relationships for alcohols, ketones and alicyclic compds, 695

kinetics, effect of membrane permeation of hydrophobic compds, 1361

marine animals, soluble organoarsenic compds, microbial degradation of arsenebanteine, 2545

methyl parathion, biotic and abiotic degradation rates in fresh water, estuarine water and sediment, 1509

of hexamethylenetetamine, 1555

tests for poorly soluble compds, 833

ultimate degradability of dyes, 1539

**Biota**

critical evaluation of toxic levels, PCB congener analysis, 2585

occurrence and distribution of toxic coplanar PCBs, 1965

toxic coplanar PCBs, occurrence and distribution, 1965

**Biotransformation**

kinetics of xenobiotics in natural waters by *aufwuchs* communities, 49

**Binaphyls**

1,4,5-tri- and 3,3',4,4'-tetra- and 3,3',4,4'-tetra- and 2,4,5-tri- and 3,3',4,4'-tetrachlorodiphenyl ether in fish, bioconcentration kinetics, 2379

3,4-CDB, photocatalytic degradation on  $TiO_2$ , aqueous suspensions, 1447

74 PCB congeners, sedimentation in upper Hudson river, 733

accelerated debromination by photolysis with sodium borohydride, 1013

analysis of deaths among patients with Yusho, 2085

and brominated diphenyl ethers, plastic mixtures of these compds, formation of PBDE and PBB, by pyrolysis, 277

halogenated PCB-analogs causing Yusho-like skin eruptions, 2069

PCB concentration in Hudson river and Long Island sound, relationship to age of striped bass, 1469

PCB concentrations, soil from central and southern Wales, 1583

PCB congener analysis, critical evaluation of toxic levels in biota, 2585

PCB electrical equipment fires, criteria for public health decision making, French experience, 2129

PCB liquid waste incinerators, measurement of combustion products, 1889

PCB methyl sulphones and related compds, identification of target cells and tissues in different species, 1671

PCB methyl sulphones, physico-chemical and immunochemical characterisation of a binding protein, 1677

PCB methylsulphone, synthesis, differences in mass and PMR spectroscopy, 2299

PCB transformer and capacitor fires, formation of chlorinated combustion products, 1881

PCB transformer incident, Birmingham state office, 1981-1987, 2155

PCB, hydroxymethylsulphone metabolites in Yusho patients, 2033

PCB-metabolite, binding protein, characterisation in bronchoalveolar lavage from healthy smokers and non-smokers, 1667

PCBPs synthesis, structural characteristics of 2,3,6,7-TCBP and analysis for PCBPs in human adipose tissue by NCI mass spectrometry, 2057

PCBs in oil from water pumps submerged in wells, health hazard, 37

PCBs in water, sediments and fish of Kupa river, Yugoslavia, 2351

PCBs,  $\alpha$ - and  $\gamma$ -hexachloro-cyclohexane, 4,4'-DDE and 4,4'-DDT in Continental air, 2497

PCBs, non-ortho substituted, detn in kanechloros, arochloros and environmental samples, 1631

photoreaction in water containing nitrite or nitrate ions, 1289

polybrominated diphenyl ethers, -biphenyls, dibenzofurans and dibenzofurans, PVC-induced Cl-Br

exchange during pyrolysis, 297  
polychlorinated-, congeners, fingerprint in samples of human subcutaneous adipose tissue, 2315  
polychlorinated-, residues in fish and shellfish in Taipei, 1835  
polychlorinated-, and organo-Cl pesticides in human milk during lactation, 1301  
refined analysis to detect and measure PCDD/PCDF, PAH, PCB, CB and CP in environmental samples, 1619  
toxic coplanar PCBs in biota, occurrence and distribution, 1965  
trichlorobiphenyl metabolism in different test species, 599  
TCDD and PCB, volatility in soil, 907  
Yusho patients, aryl hydrocarbon hydroxylase activity, 2073

**Boron compounds**  
sodium borohydride, photolytic accelerated de bromination of biphenyls, 1013

**Carbamates**  
bis phenyl-, photochemistry in aqueous soln, 513  
mancozeb in air, determination, occupational exposure in control of potato late blight, 2423  
photosynthesis inhibitory activity-structure quantitative relationships in three carbamate series, 1347

**Carbohydrates**  
aromatic and aliphatic n-alkyl glucuronides, synthesis and comparison with glucuronides from bile of fish exposed to No 2 fuel oil, 1381

**Carboxylic acids**  
2,4,5-trichlorophenoxyacetic acid and 2,4,5-trichlorophenol, sunlight degradation in oxygenated aqueous suspensions of  $TlO_4$ , 1165  
halogenated organic acids, characterisation in flue gases from municipal incinerators, 1181

**Carcinogenesis**  
2,3,7,8-TCDD, estimation of human exposure, 1851  
benz[a]anthracene, biogeochemistry at sediment water interface, 2429  
chlorinated dioxins, comparison of risk assessments by A.D.I. values and by incremental cancer risk estimates, 2141  
fluoranthene, light-dependent cytotoxicity, oxygen-dependent membrane damage, 2417  
halogenated polycyclic aromatic hydrocarbons, analysis in air, snow and automobile exhaust, 2441  
polycyclic aromatic hydrocarbons from water distribution pipes, comparison of mutagenicity and leaching, 2595  
polycyclic aromatic hydrocarbons, bioavailability from coal-derived solid product, leaching study, 2613  
soft tissue sarcoma case control study among industrial chemical workers, 2095  
soft tissue sarcoma risk among agricultural and forestry workers in Sweden, 2107

soft tissue sarcomas, mortality among agricultural workers, 2101

**Cations**  
south Swedish soils, changes in acidity and cation pools between 1949 and 1985, 2239

**Chemicals**  
 $^{13}C$  labelled organic compds, environmental hazard profile tested, concentration factors in activated sludge, algae and fish, 589  
heterogeneous-, triparametric equation to describe QSARs, 1043  
lipophilic compds, estimation of fate in plants with multimedia compartment model, 2653  
organic-, release into air, water and soil, 117  
prediction of ecotoxicological activity, 1149

**Chromatography**  
adipose tissue in normal subjects, levels of polychlorinated quaterphenyl congeners, 1419  
chlorinated anisoles and veratroles in fish, model compds, instrumental and sensory detn, 1231  
GC/MS characterisation of products from photochemistry of dibenz-p-dioxin in organic solvents at 253.7  $^{\circ}N$ , 7  
GC-MS, isolation and identification of chlorophram and two metabolites in potatoes, 1457  
headspace gas-, application to monitoring substances in industrial effluent, 469  
mussels, identification of volatile organic components, 2559  
nitro-PAH selective and sensitive analysis, 945  
octanol-water partition coeffs using reverse phase high pressure liquid chromatography, 133  
organ-P pesticides, improved silica gel cleanup method, 1065  
PCDDs, detn in surface water by liquid chromatography using on-line sample preconcentration and different spectroscopic techniques, 1123  
PCDDs and PCDFs, levels in samples of human origin and food in federal republic of Germany, 1977  
phenoxy acid herbicides, detn in water samples, 527  
polychlorinated PCDF congeners in tissues of normal and Yusho patients, 2039  
separation and identification of PCDD/PCDF isomers by Cl and EI mass spectrometry, 1625  
solid phase extraction, GC separation and EC detection of tributyltin chloride present in sea water, 61  
tetrachlorobenzene-related compds, synthesis, characterisation, 2467  
tetrachlorobenzofurans, gas chromatographic and spectroscopic characteristics, 1655  
 $[^3H]$  TCDF synthesis and characterisation as a radio-ligand for Ah receptor, 1733

**Clay**  
montmorillonite, adsorption of chloridazone, 937

**Climate**  
Mediterranean, cause of unstable eocobudget, 313

**Coal mining**  
phenol, solution factors affecting adsorption onto silstone, 1431

**Combustion**  
brominated flame retardants, pyrolysis and GC/MS analysis in on-line operation, 1353  
fires involving PCB transformers and capacitors, formation of chlorinated products, 1881  
formation of brominated aromatics, 2451  
MSW, of dioxin and furan emission data world-wide, risk assessments, 2183  
of natural fuels, formation of CDDs and CDFs, surface reaction of benzene and  $FeCl_3$ , 777  
particulate associated partial combustion products of dichlorobenzene, 973  
PCB liquid waste incinerators, measurement of products, 1889  
PCDD congener group, lab simulation and potential mechanisms to explain ratio behaviour on particulates from combustion sources, 1753  
PCDDs and PCDFs in air, particulates, sediments and soil, 1775  
propane in presence of HCl, formation of chlorinated organic compds, 161  
soils near combustion sources, PCDDs congener group profiles, simulation and evaluation of potential physical and mass transfer phenomena, 1841  
sources air emitters of chlorinated dioxin compds, assessment, Report on results of tier 4 of national dioxin strategy, 2161  
waste-, emission and chlorination pattern of PCDD/PCDF, 1221

**Concentration.see also Biocconcentration**  
2,3,7,8-pentachlorodibenzofuran, mechanism for stimulated fecal excretion in rats by treatment with squalene and liquid paraffin, 1707  
Hg and Sn in sediment samples collected from Iskenderun bay, 445  
hydrophobic-, sorption from water, hypothesis for mechanism of particle concentration effect, 745  
preconcentration of heavy metals in natural waters with hydrazones supported on silica-gel, 405  
tin in sea water, sediments and organisms in northeastern Mediterranean, 429

**Cyanogen chloride**  
formation in reaction of monochlorinated, mononitrated or monocarboxylated benzenes, phenols and anilines with chloramine and polymethyl-phenols, polychlorophenols and polynitrophenols with chloramine, 2249

**Degradation**  
aminotriis(methylene phosphonate), degradability, sludge adsorption, mobility in soils and bioconcentration, 1323  
benz[a]anthracene, biogeochemistry

at sediment water interface, 2429

bis phenyl carbamates, photochemistry in aqueous soln, 513

bisphenol, in natural waters, 1501

by sunlight of 2,4,5-trichlorophenoxyacetic acid and 2,4,5-trichlorophenol in oxygenated aqueous suspensions of  $TiO_2$ , 1165

chlorophenols with Fenton's reagent, 2225

dibenzo-p-dioxin, photochemistry in organic solvents at 253.7 Nm, products and GC/MS characterisation, 7

microbial-, of guanidinium ion, 1071

in soil of bromacil, diuron and chlorotoluron, 1003

of lignin bound pentachlorophenol residues, veratrylglycerol-8-(pentachlorophenyl)ether as model, 963

photo-, of betanal, different excited states and spectroscopic properties, 269

photo-, of chloronitrobenzenes in aqueous soln in presence of  $TiO_2$ , 809

photo-, of diphenylhydrazones in aqueous solvents, role of peroxy radicals, 19

polychlorinated dibenz-p-dioxins and dibenzofurans, destruction in contaminated water using ozone, 1857

silicones in aquatic environment, oxidative photoinduced degradation, 2567

ultimate degradability of dyes, 1539

veratrylglycerol-8-2,4-dichlorophenyl ether, model for lignin bound residues by *Phanerochaete chrysosporium*, *Corynebacterium equi* and photosensitised riboflavin, stereospecificity of degradation, 1137

**Dehalogenation**

accelerated de bromination of biphenyls by photolysis with sodium borohydride, 1013

**Detergents**

n-dodecylbenzene sulphonate -"C mineralisation

**Dioxins**

1,2,3,4-tetrab, dibenzodioxin pyrolysis, Cl-Br exchange with chlorine donors, 1579

2,3,7,8-substituted PCDD and PCDF at sub-ppb levels, isomerspecific analysis of pentachlorophenol and sodium pentachlorophenol, 1759

2,3,7,8-TCDD and PCDDs, evaluation in fly ash from refuse incinerators, 1865

2,3,7,8-TCDD equivalents, validation of *in vitro* bioassays, 1723

2,3,7,8-TCDD, AHH induction activity in C57BL/6 and DBA/2 mice, effect of receptor antagonist, 1,3,6,8-tetrachlorodibenzofuran, 1739

2,3,7,8-TCDD, AHH induction activity, effects of receptor modulators in C57BL/6 and DBA/2 mice, 1687

2,3,7,8-TCDD, assessment of contamination at 2,4,5-trichlorophenol production, use facilities and waste disposal sites, 2175

2,3,7,8-TCDD, detn in human adipose tissue on whole weight and lipid bases, 935

2,3,7,8-TCDD, estimation of human exposure, 1851

2,3,7,8-TCDD, human exposure, 2331

2,3,7,8-TCDD, human exposure, inhalation via emissions and ingestion via cow's milk, 2079

2,3,7,8-tetrachloro-p-dibenzodioxin treatment, transmission and scanning microscopic characterisation of mouse hepa 1 hepatoma cells, 1713

2,3,7,8-tetrachlorodibenz-p-dioxin long-term study of ecosystem contamination, 1791

2,3,7,8-tetrachlorodibenz-p-dioxin, health effects of long term exposure, 2089

2,3,7,8-tetrachlorodibenzodioxin, elevated levels in adipose tissue of U.S. veterans from Vietnam war, 1997

and dibenzofurans, recent findings and comments on pharmacokinetic, biochemical effects and animal toxicology, 2191

and furans, environmental levels and fate, 2193

and furans, human tissue levels, 2195

and related aromatic chloro-ethers in Baltic wildlife, 1787

and related compds from municipal incinerators in Japan, 1901

chlorinated-, and dibenzofurans in human milk, health hazard assessment, 2147

chlorinated-, and related compds, intracellular high-affinity binding proteins, 2187

chlorinated-, comparison of risk assessments by A.D.I.-values and by incremental cancer risk estimates, 2141

chlorinated-, mortality of exposed workers, 2111

chlorinated-, immunoassay based on monoclonal antibody and an enzyme linked immunosorbent assay, 1635

chlorodibenz-dioxins and -furans from municipal incinerators in Japan, 1907

chlorodibenz-p-dioxins in feral pigeons, 1749

chromatographic separation and identification of PCDD/PCDF isomers by CI and EI mass spectrometry, 1625

combustion sources as emitters of chlorinated dioxin compds, assessment, Report on results of tier 4 of national dioxin strategy, 2161

congener profiles in soils near combustion sources, evaluation of potential governing mechanisms, 1095

dibenzo-p-dioxin, electrophilic bromination, 1661

dibenzo-p-dioxin, photochemistry in organic solvents at 253.7 Nm, products and GC/MS characterisation, 7

dibenzo-p-dioxins, polybrominated and chlorinated, synthesis, biologic and toxic effects and structure-activity relationships, 1729

dibenzodioxins and dibenzofurans, brominated and brominated/chlorinated, potential environmental contaminants, 1873

dioxin Missouri update, 1986, 1869

human fat sampling for dioxin analysis, 2063

in environment, health hazard, 43

*in vitro* induction of AHH by 2,3,7,8-TCDD and related toxic halogenated aryl hydrocarbons in

rate hepatoma cells for quantitative detn of toxins, 791

municipal waste incinerators, formation and emmision of polycyclic and polyhalogenated compds, 143

PCDD and PCDF in motor oils and waste oils, analysis, 1649

PCDD and PCDF in motor oils, refined oils and contaminated soils, 1847

PCDD congener group, lab simulation and potential mechanisms to explain ratio behaviour on particulates from combustion sources, 1753

PCDDs and PCDFs from incinerator flyash, isomer dependent bioavailability to fresh water fish, 657

PCDDs and PCDFs from waste-to-energy plants, programme in Sweden to limit emmisions, 1911

PCDDs and PCDFs in air, particulates, sediments and soil, 1775

PCDDs and PCDFs in rats dependent on vehicle used as carrier, 1193

PCDDs and PCDFs in tissues of Yusho patients from Japan and China, comparison, 2017

PCDDs and PCDFs, bioavailability from contaminated Wisconsin river sediment to fresh water fish, 667

PCDDs and PCDFs, daily intake by Japanese through food, 1823

PCDDs and PCDFs, environmental fate, sources, levels and isomeric pattern in various matrices, 1603

PCDDs and PCDFs, interactive effects in human mother's milk, 1701

PCDDs and PCDFs, levels in human tissues after pentachlorophenol poisoning, 1989

PCDDs and PCDFs, levels in human tissues and Food in Japan, 2047

PCDDs and PCDFs, levels in samples of human origin and food in federal republic of Germany, 1977

PCDDs and PCDFs in human body from the diet, 1971

PCDDs and PCDFs in human body from the diet, 1971

PCDDs, monitoring in Osaka bay using blue mussel, 1817

PCDDs, PCDFs and mixed bromo/chloro compds, NCI mass spectrometry for detection and screening of potential environmental pollutants, 713

PCDD/PCDF, emission and chlorination pattern from waste combustion, 1221

PCDD/PCDF, formation in fly ash from waste incinerators, 1917

PCDD/PCDF, search for industrial sources of short-chain chlorinated hydrocarbons, 1949

polybrominated dibenz-p-dioxins and dibenzofurans in flame retardants, 1877

polybrominated diphenyl ethers, -biphenyls, dibenzodioxins and -dibenzofurans, PVC-induced Cl-Br exchange during pyrolysis, 297

polychlorinated dibenzodioxins and dibenzofurans in human milk from West Germany, 1983

polychlorinated dibenz-p-dioxin and dibenzofuran levels, comparison in human breast milk from Vietnam and USA, 2003

polychlorinated dibenz-p-dioxins and dibenzofurans in wastes of technical hexachlorocyclohexane, 1829

polychlorinated dibenz-p-dioxins

and dibenzofurans, destruction in contaminated water using ozone, 1857

polychlorinated dibenzo-p-dioxins and dibenzofurans, detn of isomers from incinerators, related samples in Japan, 1959

polychlorinated dibenzo-p-dioxins and dibenzofurans, levels in persons with high and normal levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin, 2027

polychlorinated dibenzofurans and dioxins in exhaust fumes of cars run on leaded petrol, 29

receptor, structure and function, DNA-binding protein similar to steroid hormone receptor, 1681

refined analysis to detect and measure PCDD/PCDF, PAH, PCB, CB and CP in environmental samples, 1619

soils near combustion sources, PCDDs congener group profiles, simulation and evaluation of potential physical and mass transfer phenomena, 1841

TCDD contaminated soil, animals exposure, potential residues in derived foods, 2123

TCDD distribution on all territory around Seveso, use in epidemiology and hint into dynamical models, 1765

TCDD levels in human adipose tissue distribution, statistical evaluations reflect misleading interpretations, 2135

trilateral 2,3,7,8-tetrachlorodibenzo-p-dioxin administered to Holstein dairy cows, bioavailability, 1743

USEPA national dioxin study, tiers 3,5,6 and 7, 2169

YCDD and PCB, volatility in soil, 907

**Diseases see Health hazards**

**Drugs**  
rats poisoned with Ni, effect of chelating drugs on pharmacokinetics and metabolic disposition, 259

squalene and liquid paraffin, treatment of rats, mechanism for stimulated fecal excretion of 2,3,4,7,8-pentachlorodibenzofuran, 1707

**Dyes**  
effluents, dye-containing, colour removal by bentonites, 2523

ultimate degradability, 1539

**Ecobudgets**  
unstable-, caused by 'Mediterranisation' of climate in Mediterranean countries, 313

**Ecological studies**  
2,3,7,8-tetrachlorodibenzo-p-dioxin long-term study of ecosystem contamination, 1791

environmental conditions in Abu Kir bay, physico-chemical characteristics and water circulation, 361

Mamara sea, pollutants and problems, 339

northeastern Greece, ecological parameter of surface water, 351

Po river delta lagoon, trophic state gradients and zooplankton and zoobenthos distribution, 571

**Ecosystems**  
1,2,4,5,7,8-hexachloroxanthene, measurement and significance, 869

aqueous micro-, method to assess periodic responses to photosynthetic inhibition, 287

cypermethrin, distribution and fate, prediction, 1373

**Effluents**  
Abu Kir bay, environmental conditions, plankton distribution from land based effluents, 559

dye-containing-, colour removal by bentonites, 2523

industrial-, application of headspace gas chromatography to monitoring of substances 469

**Environment**  
2,3,7,8-TCDD, human exposure, 2331

brominated flame retardants, ubiquitous environmental pollutants? 2343

conditions in Abu Kir bay, physico-chemical characteristics and water circulation, 361

conditions in Abu Kir bay, plankton distribution from land based effluents, 559

dibenzodioxins and dibenzofurans, brominated and brominated/-chlorinated, potential environmental contaminants, 1873

dioxins and furans, levels and fate, 2193

fate of chemicals, effect of binding interaction between pollutants and dissolved humic materials, 1115

German national research centers, 605

halogenated polycyclic aromatic hydrocarbons, analysis in air, snow and automobile exhaust, 2441

hazard profile of <sup>13</sup>C labelled organic compds tested, concentration factors in activated sludge, algae and fish, 589

health hazard from dioxins, 43

kanechloros, arochloros and environmental samples, detn of non-ortho substituted, PCBs, 1631

measurements with atmospheric Hg-monitor having speciation capabilities, 183

PCDDs and PCDFs in air, particulates, sediments and soil, 1775

persistent chemicals, bio-indicators for monitoring the spread, 225

photoincorporations of polychlorobenzenes into humic model monomers, 495

pollution, impact on life in Mediterranean, opening address of 3rd international congress, 311

refined analysis to detect and measure PCDD/PCDF, PAH, PCB, CB and CP in samples, 1619

research, contribution from Kuwait, 651

samples of aromatic polycyclic hydrocarbons, new analysis by high resolution emission spectroscopy, 485

technology, ion flotation, 623

**Enzymes**  
bacteria, characterisation with phenol-oxidase activity from soil in La Laguna area, Spain, 2627

effect of sodium fluoride on erythrocyte membrane function, reference to metal ion transport in rabbits, 1087

*in vitro* induction of AHH by 2,3,7,8-TCDD and related toxic halogenated aryl hydrocarbons in rat hepatoma cells for quantitative detn of toxins, 791

veratrylglycerol- $\beta$ -2,4-dichlorophenyl ether, model for lignin bound residues by *Phanerochaete chrysosporium*, *Corynebacterium equi* and photosensitised riboflavin, stereospecificity of degradation, 1137

Yusho patients, aryl hydrocarbon hydroxylase activity, 2073

**Epidemiology**  
human fat sampling for dioxin analysis, 2063

TCDD distribution on all territory around Seveso, use in epidemiology and hint into dynamical models, 1765

Yusho skin eruptions in workers synthesising polychlorinated and polybrominated dibenzofurans, 2201

**Ethers**  
1,4,5-tri- and 3,3',4,4'-tetrachlorobiphenyl and 2,4,5-tri- and 3,3',4,4'-tetrachlorodiphenyl ether in fish, bioconcentration kinetics, 2379

brominated diphenyl ethers, biphenyls and plastic mixtures of these compds, pyrolysis, formation of PDDF and PBDD, 277

chlorinated anisoles and veratroleos in fish, model compds, instrumental and sensory detn, 1231

chloroanisoles, uptake and elimination by fish, 953

dioxins and related aromatic chloro-ethers in Baltic wildlife, 1787

polybrominated biphenyl ethers in marine fish, shellfish and river and marine sediments, 2389

polybrominated diphenyl ethers, -biphenyls, dibenzodioxins and dibenzofurans, PVC-induced Cl-Br exchange during pyrolysis, 297

veratrylglycerol- $\beta$ -2,4-dichlorophenyl ether, model for lignin bound residues by *Phanerochaete chrysosporium*, *Corynebacterium equi* and photosensitised riboflavin, stereospecificity of degradation, 1137

veratrylglycerol- $\beta$ -(penta-chlorophenyl)ether, a model for lignin bound pentachlorophenol residue degradation, 963

**Exhausts**  
chain saw, new strategy for monitoring exposure, 99

from cars run on leaded petrol, identification of polychlorinated dibenzofurans and dioxins, 29

halogenated polycyclic aromatic hydrocarbons, analysis in air, snow and automobile exhaust, 2441

**Farming**  
soft tissue sarcomas, mortality among agricultural workers, 2101

soft tissue sarcoma risk among agricultural and forestry workers in Sweden, 2107

**Fires**  
 PCB electrical equipment fires, criteria for public health decision making, French experience, 2129  
 PCB transformer incident, Binghamton state office, 1981-1987, 2155  
 wood burning pollution, diurnal variations in Canada, 155

**Fish and marine organisms**  
 age of striped bass in Hudson river and Long Island sound, relationship to PCB concentration, 1469  
 blue mussel, use in monitoring PCDDs in Osaka bay, 1817  
 British fresh water-, Hg, Pb and Cd in muscles, 901  
 Cd and Hg pollution, interactive effect on allozyme polymorphisms in *Cerithium scabridum*, 543  
 Cd and Hg pollution, interactive effects on allozyme polymorphisms in *Cerithium scabridum*, 543  
 copepod community of eastern Adriatic coast, impact of pollution, 369  
 dissolved and dispersed hydrocarbons, long-term impact in gulf of Iskenderun, 381  
 environmental hazard profile of <sup>14</sup>C labelled organic compds tested, concentration factors in activated sludge, algae and fish, 589  
 fathead minnow larvae, photo-induced toxicity of polycyclic aromatic hydrocarbons, 1395  
 fish and shellfish in Taipei, presence of polychlorinated biphenyl residues, 1835  
 fish exposed to No 2 fuel oil, glucuronides from bile, comparison with aromatic and aliphatic n-alkyl glucuronides, 1381  
 fish, bioconcentration kinetics of 1,4,5-tri- and 3,3',4,4'-tetrachlorobiphenyl and 2,4,5-tri- and 3,3',4,4'-tetrachlorodiphenyl ether, 2379  
 fish, chlorinated anisoles and veratroles as model compds, instrumental and sensory detn., 1231  
 fish, effect of lindane and atropine sulphate on tissues, a chironotoxicological approach, 1339  
 fish, pyrene toxicity, synergism by piperonyl butoxide and by UV light, 2291  
 fish, uptake and elimination of chloroanisoles, 953  
 fresh water-, bioavailability of PCDDs and PCDFs from contaminated Wisconsin river sediment, 667  
 fresh water-, isomer dependent bioavailability of PCDDs and PCDFs from incinerator flyash, 657  
 marine animals, soluble organoarsenic compds, microbial degradation of arsenobetaine, 2545  
 marine bivalves, exposure to tributyltin, sub-lethal growth effects and mortality, 201  
 marine fish, shellfish and river and marine sediments, presence of polybrominated biphenyl ethers, 2389  
 marine microorganisms, formation of trimethylarsine oxide from arsenobetaine, 2551  
 mussels, identification of volatile organic components, 2559  
*Mytilus edulis*, Hg uptake, effect of intoxication period in the day and fractionation of the pollutant on resulting contamination, 921  
 organoarsenic compds in fish and algae, exact m-rs measurement using fast <sup>14</sup>C bombardment mass spectrometry, 51  
 PCBs in water, sediments and fish of Kupa river, Yugoslavia, 2351

**Flame retardants**  
 brominated-, pyrolysis and GC/MS analysis in on-line operation, 1353  
 brominated-, ubiquitous environmental pollutants? 2343  
 presence of polybrominated dibenz-p-dioxins and dibenzofurans, 1877

**Food**  
 2,3,7,8-TCDD, human exposure, 2331  
 bound <sup>14</sup>C-fenofos residues, formation in soil and vegetables under field conditions, 167  
 daily intake by Japanese of PCDDs and PCDFs, 1823  
 Florida strawberry farms, dislodgable captan residues, 1257  
 mutagenicity investigations, aqueous sulphite-nitrite system, 2479  
 PCDDs and PCDFs, levels in human tissues and food in Japan, 2047  
 PCDDs and PCDFs, levels in samples of human origin and food in federal republic of Germany, 1977  
 PCDDs and PCDFs in human body from the diet, 1971  
 potatoes, isolation and identification of chlorpropham and two metabolites by GC-MS, 1457  
 TCDD contaminated soil, animals exposure, potential residues in derived foods, 2123

**Fuels**  
 hydrocarbon fuel spill dispersion on water, literature review, 1475

**Fungicides**  
 azaconazole, wood preservation, model experiments predicting aerial levels, 1281  
 dislodgable captan residues in Florida strawberry farms, 1257  
 environmental Hg, correlation between contamination and leukaemia in men and cattle, 253  
 folpet, N-(dichloromethylthio) phthalimide a photo-metabolite, 127  
 mancozeb in air, determination, occupational exposure in control of potato late blight, 2423

**Furans**  
 2,3,4,7,8-pentaclorodibenzofuran, mechanism for stimulated fecal excretion in rats by treatment with squalene and liquid paraffin, 1707  
 2,3,4,7,8-pentaclorodibenzofuran, subcellular distribution in rat liver, 1695  
 2,3,7,8-substituted PCDD and PCDF at sub-ppb levels, isomerspecific analysis of pentaclorophenol and sodium pentaclorophenate, 1759  
 2,3,7,8-TCDD equivalents, validation of *in vitro* bioassays, 1723  
 2-HODBF, formation on irradiation of air saturated soln of 2-biphenolol, 1205  
 analysis of deaths among patients with Yusho, 2085  
 carbofuran-<sup>14</sup>C, uptake by rice plants after root zone application as controlled release formulation, 1273  
 CDFs and CDDs, formation during combustion of natural fuels, surface reaction of benzene and FeCl<sub>3</sub>, 777  
 chlorinated dioxins and dibenzofurans in human milk, health hazard assessment, 2147  
 chlorinated dioxins and dibenzofurans in human milk, health hazard assessment, 2147  
 chlorodibenz-dioxins and -furans from municipal incinerators in Japan, 1907  
 chromatographic separation and identification of PCDD/PCDF isomers by CI and EI mass spectrometry, 1625  
 dibenzo-, electrophilic bromination, 221  
 dibenzodioxins and dibenzofurans, brominated and brominated/-chlorinated, potential environmental contaminants, 1873  
 dibenzofurans and dioxins, recent findings and comments on pharmacokinetic, biochemical effects and animal toxicology, 2191  
 furans and dioxins, environmental levels and fate, 2193  
 furans and dioxins, human tissue levels, 2192  
 halogenated PCB-analogs causing Yusho-like skin eruptions, 2069  
 MSW combustion of dioxin and furan emission data world-wide, risk assessments, 2183  
 municipal waste incinerators, formation and emission of polycyclic and polyhalogenated compds, 143  
 PCDF metabolites, synthesis and mass spectral properties, 1641  
 PCDF/PCDD, emission and chlorination pattern from waste combustion, 1221  
 PCDF/PCDD, formation in fly ash from waste incinerators, 1917  
 PBDD and PBDD from pyrolysis of brominated diphenyl ethers, biphenyls and plastic mixtures of these compds, 277  
 PCDF and PCDD in motor oils, refined oils and contaminated soils, 1847  
 PCDFs and PCDDs from incinerator flyash, isomer dependent bioavailability to fresh water fish, 657  
 PCDFs and PCDDs, bioavailability from contaminated Wisconsin river sediment to fresh water fish, 667  
 PCDFs and PCDDs, and mixed bromo/chloro compds, NCI mass spectrometry for detection and screening of potential environmental pollutants, 713  
 PCDFs and PCDDs from waste-to-energy plants, programme in Sweden to limit emmisions, 1911  
 PCDFs and PCDDs in air, particulates, sediments and soil, 1775  
 PCDFs and PCDDs in rats dependent on vehicle used as carrier, 1193  
 PCDFs and PCDDs in tissues of Yusho patients from Japan and China, comparison, 2017  
 PCDFs and PCDDs levels in human tissues after pentaclorophenol poisoning, 1989  
 PCDFs and PCDDs levels in human

tissues and food in Japan, 2047  
PCDFs and PCDDs levels in samples of human origin and food in federal republic of Germany, 1977

PCDFs and PCDDs, daily intake by Japanese through food, 1823  
PCDFs and PCDDs, environmental fate, sources, levels and isomeric pattern in various matrices, 1603

PCDFs and PCDDs, interactive effects in human mother's milk, 1701

PCDFs, detn in surface water by liquid chromatography using on-line sample preconcentration and different spectroscopic techniques, 1123

PCDFs and PCDDs in human body from the diet, 1971

polybrominated dibenzo-p-dioxins and dibenzofurans in flame retardants, 1877

polybrominated diphenyl ethers, - biphenyls, dibenzodioxine and - dibenzofurans, PVC-induced Cl-Br exchange during pyrolysis, 297

polychlorinated dibenzodioxins and dibenzofurans in human milk from West Germany, 1983

polychlorinated and polybrominated dibenzofurane synthesis, Yusho skin eruptions in workers, 2201

polychlorinated dibenzo-p-dioxin and dibenzofuran levels, comparison in human breast milk from Vietnam and USA, 2003

polychlorinated dibenzo-p-dioxins and dibenzofurans in wastes of technical hexachlorocyclohexane, 1829

polychlorinated dibenzo-p-dioxins and dibenzofurans, destruction in contaminated water using ozone, 1857

polychlorinated dibenzo-p-dioxins and dibenzofurans, levels in persons with high and normal levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin, 2027

polychlorinated dibenzo-p-dioxins and dibenzofurans, detn of isomers from incinerators, related samples in Japan, 1959

polychlorinated dibenzofurans and dioxins in exhaust fumes of cars run on leaded petrol, 29

polychlorinated PCDF congeners in tissues of normal and Yusho patients, 2039

receptor antagonist, 1,3,6,8-tetrachlorodibenzo-p-dioxin, effect on 2,3,7,8-TCDD AHH induction activity in C57BL/6 and DBA/2 mice, 1739

refined analysis to detect and measure PCDD/PCDF, PAH, PCB, CB and CP in environmental samples, 1619

tetrachlorobenzofurans, gas chromatographic and spectroscopic characteristics, 1655

[<sup>3</sup>H] TCDF synthesis and characterisation as a radioligand for Ah receptor, 1733

**Genetics**  
interactive effects of Cd and Hg on pollution in allozyme polymorphisms in *Curithium scabridum*, 543

**Geographical studies**  
climate 'Mediterranisation' in Mediterranean, cause of unstable eocubudget, 313

northeastern Greece, ecological parameter of surface water, 351  
water systems in northern Greece, correlation of some organic pollution factors, 395

watercourse pollution, sources in Italy and mediterranean France, assessed by macrophytes, 331

chlorination pattern and emission of PCDD/PCDF from waste combustion, 1221

electrophilic bromination of dibenzofuran, 221

electrophilic bromination of dibenzo-p-dioxin, 1661

lipophilic volatile organohalogen compds, formation during laboratory chlorination of ground water samples from Yugoslavia, 2279

**Health hazards**  
2,3,7,8-TCDD, estimation of human exposure, 1851

2,3,7,8-TCDD, human exposure, 2331

2,3,7,8-TCDD, human exposure, inhalation via emissions and ingestion via cow's milk, 2079

2,3,7,8-tetrachlorodibenzo-p-dioxin, health effects of long term exposure, 2089

2,3,7,8-tetrachlorodibenzodioxin, elevated levels in adipose tissue of U.S. veterans from Vietnam war, 1997

2,3,7,8-tetrachlorodibenzodioxin, elevated levels in adipose tissue of U.S. veterans from Vietnam war, 1997

analysis of deaths among patients with Yusho, 2085

binding protein for PCB-metabolite, characterisation in bronchoalveolar lavage from healthy smokers and non-smokers, 1667

chain-saw exhaust, new strategy for monitoring exposure, 99

chloracne among chemical workers, mortality patterns, 2117

chlorinated dioxins and dibenzofurans in human milk, health hazard assessment, 2147

chlorinated dioxins, comparison of risk assessments by A.D.I.-values and by incremental cancer risk estimates, 2141

chlorinated dioxins, mortality of exposed workers, 2111

dioxins and furans, environmental levels and fate, 2193

dioxins and furans, human tissue levels, 2195

environmental Hg, correlation between contamination and leukaemia in men and cattle, 253

environmental measurements with atmospheric Hg-monitor having speciation capabilities, 183

Florida strawberry farms, dislodgable captan residues, 1257

from dioxins in environment, 43

from PCBs in oil from water pumps submerged in wells, 37

halogenated PCB-analogs causing Yusho-like skin eruptions, 2069

human fat sampling for dioxin analysis, 2063

levels of polychlorinated quaterphenyl congeners in adipose tissue of normal subjects, 1419

mancozeb in air, determination, occupational exposure in control of potato late blight, 2423

Mediterranean beaches of Israel, association between seawater pollution measured by bacterial indicators and morbidity among bathers, 565

MSW combustion of dioxin and furan emission data world-wide, risk assessments, 2183

partition coeff's of n-octanol-water of organic environmental chemicals in humans, correlation with their bioconcentration potential, 239

PCB electrical equipment fires, criteria for public health decision making, French experience, 2129

PCB, hydroxymethylsulphone metabolites in Yusho patients, 2033

PCBPs synthesis, structural characteristics of 2,3,6,7-TCBP and analysis for PCBPs in human adipose tissue by NCI mass spectrometry, 2057

PCDDs and PCDFs in tissues of Yusho patients from Japan and China, comparison, 2017

PCDDs and PCDFs, daily intake by Japanese through food, 1823

PCDDs and PCDFs, levels in human tissues and food in Japan, 2047

PCDDs and PCDFs in human body from the diet, 1971

pentachlorophenol poisoning, levels of PCDDs and PCDFs in human tissues, 1989

polychlorinated dibenzodioxins and dibenzofurans in human milk from West Germany, 1983

polychlorinated biphenyl congeners, fingerprint in samples of human subcutaneous adipose tissue, 2315

polychlorinated dibenz-p-dioxin and dibenzofurans levels in human breast milk from Vietnam and USA, comparison, 2003

polychlorinated dibenz-p-dioxins and dibenzofurans, levels in persons with high and normal levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin, 2027

polychlorinated PCDF congeners in tissues of normal and Yusho patients, 2039

soft tissue sarcoma case control study among industrial chemical workers, 2095

soft tissue sarcoma risk among agricultural and forestry workers in Sweden, 2107

soft tissue sarcomas, mortality among agricultural workers, 2101

thermolysis of pesticide residues during tobacco smoking, 521

toxic coplanar PCBs in biota, occurrence and distribution, 1965

Yusho patients, aryl hydrocarbon hydroxylase activity, 2073

Yusho skin eruptions in workers synthesising polychlorinated and polybrominated dibenzofurans, 2201

**Herbicides**

and pesticides, controlled release formulations in freshwater systems, 615

and pesticides, photolysis of 2,3-dihydro-5,6-dimethyl-1,4-dithiin-1,4,4-tetraoxide, 1319

atrazine effect on mineralisation of n-dodecylbenzene sulphonate -  $^{14}\text{C}$  in soil, 1521

atrazine, analysis in underground waters in parts per trillion levels, early warning method for contamination and soil distribution, 1425

bromacil, diuron and chlorotoluron, degradation in soil, 1003

chloridiazone, adsorption by montmorillonite, 937

chloropropham and two metabolites, isolation and identification in potatoes by GC-MS, 1457

methyl parathion, biotic and abiotic degradation rates in fresh water, estuarine water and sediment, 1509

phenoxy acid-, detn in water samples, 527

soft tissue sarcoma risk among agricultural and forestry workers in Sweden, 2107

soft tissue sarcomas, mortality among agricultural workers, 2101

UV-ozone as a waste disposal pretreatment, 2321

**Hormones**

dioxin receptor, structure and function, DNA-binding protein similar to steroid hormone receptor, 1681

rats, role of Ah receptor in mediating down regulation of uterine and hepatic estrogen receptor levels, 1691

**Humic substances**

artificially recharged ground water processed from humus rich surface water, effect of permanganate oxidation and chlorination on mutagenic activity and other qualities, 1489

dissolved humic materials, charge-transfer interaction with pollutants and binding interaction with chloranil, 1115

humic acid in natural waters, photoactivity, 523

humic model monomers, environmental photoincorporations of polychlorobenzenes, 495

humic substances, photochemical aging, 1463

photoinduced formation of oxygen species and their reaction with organic chemicals in soln, 505

**Hydrazones**

diphenyl-, photo-induced degradation in aqueous solns, role of peroxy radicals, 19

supported on silica-gel, preconcentration of heavy metals in natural waters, 405

**Hydrocarbons** see also Benzene derivatives

aromatic polycyclic-, effect of high-levels in polluted stream, sediment physicochemical properties and benthic organisms, 1053

aromatic polycyclic-, in environmental samples, new analysis by high resolution emission spectroscopy, 485

aromatic polycyclic-, photo-induced toxicity to fathead minnow larvae, 1395

aromatic-, sediment-water partition coeffs and HPLC retention factors, 109

chlorinated short-chain-, search for industrial sources, 1949

chlorinated-, in sediments of Elbe river and estuary, 2487

cyanogen chloride, formation in reaction of monochlorinated, mononitrated or monoacetylated benzenes, phenols and anilines with chloramine and polymethylphenols, polychlorophenols and polynitrophenols with chloramine, 2249

dissolved and dispersed-, long-term impact in gulf of Iskenderun, 381

hydrocarbon fuel spill dispersion on water, literature review, 1475

naphthalene, reactions with nitrogen dioxide in UV-light, 519

nitro-PAH selective and sensitive analysis, 945

propane, combustion in presence of HCl, formation of chlorinated organic compds, 161

pyrene in water containing nitrite ion, formation of 1-nitropyrene by photolysis, 859

pyrene toxicity in fish, synergism by piperonyl butoxide and UV light, 2291

refined analysis to detect and measure PCDD/PCDF, PAH, PCB, CB and CP in environmental samples, 1619

substituted aryl-, Ah receptor binding, a QSAR analysis, 1719

**Hydrophobicity**

membrane permeation of hydrophobic compds, effect on biodegradation kinetics, 1361

**Incineration**

carbon tetrachloride destruction in stoichiometric  $\text{CH}_4/\text{CCl}_4/\text{air}$  premixed flat flame, 989

waste-, emission of organic micropollutants, 813

**Incinerators**

2,3,7,8-TCDD and PCDDs, evaluation in fly ash from refuse incinerators, 1665

2,3,7,8-TCDD, human exposure, inhalation via emissions and ingestion via cow's milk, 2079

CDDE and CDFs, formation during combustion of natural fuels, surface reaction of benzene and  $\text{FeCl}_3$ , 777

chlorinated residues, valorisation via high temp incineration and recovery of HCl and energy, 1929

chlorodibenz-dioxins and -furans from municipal incinerators in Japan, 1907

dioxin congener profiles in soils near combustion sources, evaluation of potential governing mechanisms, 1095

dioxins and related compds from municipal incinerators in Japan, 1901

flyash, isomer dependent bioavailability of PCDDs and PCDFs to fresh water fish, 657

flue gases from municipal incinerators, characterisation of halogenated organic acids, 1181

in-situ Hg speciation in flue gas by liquid and solid sorption systems, 821

municipal waste-, formation and emission of polycyclic and polyhalogenated compds, 143

new MSW incinerators, experiences from Sweden, 1937

particulate associated partial combustion products of dichlorobenzene, 973

PCB liquid waste incinerators, measurement of combustion products, 1889

PCDDs and PCDFs from waste-to-energy plants, programme in Sweden to limit emissions, 1911

PCDDs and PCDFs, environmental fate, sources, levels and isomeric pattern in various matrices, 1603

PCDD/PCDF, formation in fly ash from waste incinerators, 1917

polychlorinated dibenz-p-dioxins and dibenzofurans, detn of isomers from incinerators, related samples in Japan, 1959

sewage sludge burning incinerator, emission of chlorinated organics, 1895

testing and evaluation programme,

air pollution control technology in Canada, 1923  
waste incineration, guidelines based on theory and practise, 1943

**Industry**  
2,3,7,8-TCDD, assessment of contamination at 2,4,5-trichloroethen production, use facilities and waste disposal sites, 2175  
biodegradability of hexamethylene-tetramine, 1555  
bisphenol, degradation in natural waters, 1501  
chloride among chemical workers, mortality patterns, 2117  
chlorinated dioxins, mortality of exposed workers, 2111  
chlorinated residues, valorisation via high temp incineration and recovery of HCl and energy, 1929  
industrial effluent, application of headspace gas chromatography to monitoring of substances, 469  
microbial degradation of guanidinium ion, 1071  
municipal waste incineration technology, 2199  
PCDD/PCDF, search for industrial sources of short-chain chlorinated hydrocarbons, 1949  
phototoxicity, biological activity, occurrence and synthesis of phenylheptatriene, 2405  
polychlorinated dibenz-p-dioxins and dibenzofurans in wastes of technical hexachlorocyclohexane, 1829  
soft tissue sarcoma case control study among industrial chemical workers, 2095

**Insecticides**  
cypermethrin, environmental distribution and fate, prediction, 1373  
lindane, effect on zooplankton under outdoor conditions, 1527  
organochlorine-, residues in human fat and milk samples in S.Africa, 705  
PCBs,  $\alpha$ - and  $\gamma$ -hexachlorocyclohexane, 4,4'-DDT and 4,4'-DDT in Cintinental air, 2497  
plant foliage, accumulation and release kinetics, exposure to  $\alpha$ - and  $\gamma$ -HCH, DDT and DDE and PCB mixture, 2515  
pyrethroid-, persistence in soil before and after formulation, 1311  
UV-ozoneation as a waste disposal pretreatment, 2321

**Isotopic labelled compounds**  
 $^{14}\text{C}$ -labelled organic chemicals in aerobic and anaerobic soil, biomineralisation rates, 1031  
 $^{14}\text{C}$  labelled organic compds, environmental hazard profile tested, concentration factors in activated sludge, algae and fish, 589  
 $^{14}\text{H}$  TCDF synthesis and characterisation as a radio-ligand for Ah receptor, 1733  
bioavailability of tritiated 2,3,7,8-tetrachlorodibenzo-p-dioxin administered to Holstein dairy cows, 1743  
bound  $^{14}\text{C}$ -furanos residues, formation in soil and vegetables under field conditions, 167  
 $^{14}\text{H}$  TCDF synthesis and characterisation as a radio-ligand for Ah receptor, 1733

**Ketones**  
and alcohols and alicyclic compds, biodegradability-quantitative structure relationships, 695 vapour pressure and gas-film coeffs, 69

**Kinetics**  
biodegradation kinetics, effect of membrane permeation of hydrophobic compds, 1361  
bioconcentration kinetics, 1,4,5-tri- and 3,3',4,4'-tetrachlorobiphenyl and 2,4,5-tri- and 3,3',4,4'-tetrachlorodiphenyl ether in fish, 2379  
biotransformation- of xenobiotics in natural waters by aufwuchs communities, 49  
of nitrogen oxide oxidation by ozone and by oxygen, 537  
plant foliage, accumulation and release kinetics, exposure to  $\alpha$ - and  $\gamma$ -HCH, DDT and DDE and PCB mixture, 2515  
rate constants for reactions of singlet oxygen with phenols and other compds in water, 681

**Lactones**  
 $\text{C}_5\text{-C}_1$ ,  $\gamma$ -lactones, identification in atmospheric aerosols, 1143

**Leaching**  
Hg from peat soil, 1215  
polycyclic aromatic hydrocarbons, bioavailability from coal-derived solid product, leaching study, 2613  
polycyclic aromatic hydrocarbons from water distribution pipes, comparison of mutagenicity and leaching, 2595

**Lignins**  
residues as tracers of organic waste transport, 171

**Mechanism**  
chloridazone, adsorption by montmorillonite, 937  
chlorophropham and two metabolites, isolation and identification in potatoes by GC-MS, 1457  
evaluation of potential governing mechanisms, dioxin congener profiles in soils near combustion sources, 1095  
sorption of hydrophobic chemicals from water, hypothesis for mechanism of particle concentration effect,

**Metabolism**  
rats poisoned with Ni, effect of chelating drugs on pharmacokinetics and metabolic disposition, 259  
trichlorobiphenyl-, in different test species, 599

**Metabolites**  
PCB, hydroxymethylsulphone metabolites in Yusho patients, 2033  
PCBs, binding protein, characterisation in bronchoalveolar lavage from healthy smokers and non-smokers, 1667  
PCDF-, synthesis and mass spectral properties, 1641  
ultimate degradability of dyes, 1539

**Metals and their compounds**  
biomineralisation rates of  $^{14}\text{C}$ -labelled organic chemicals in aerobic and anaerobic soil, 1031  
boron levels in ground waters of Halkidiki, 419  
Cd and Hg pollution, interactive effects on allozyme polymorphisms in *Cerithium scabridum*, 543  
Cd distribution on cells, protective effect of different envelopes, marine bacterial investigation, 2623  
environmental Hg, correlation between contamination and leukaemia in men and cattle, 253 environmental measurements with atmospheric Hg-monitor having speciation capabilities, 183  
heavy metal pollution in Guadiana river and Guadalquivir estuary, 463  
heavy metal pollution in rivers and lakes of northern Greece, 455  
heavy metals from municipal runoff to sediments of lake Pontchartrain, Louisiana, 2579  
heavy metals in sinter-pavements, vegetation changes and soil pollution, 1021  
heavy metals, preconcentration in natural waters with hydrazones supported on silica-gel, 405  
Hg and methyl mercury in scalp hair of inhabitants from Mediterranean areas, 877  
Hg and Sn in gulf of Iskenderun, 445  
Hg leaching from peat soil, 1215  
Hg uptake by *Mytilus edulis*, effect of intoxication period in the day and fractionation of the pollutant on resulting contamination, 921  
Hg, Pb and Cd in muscle of British fresh water fish, 901  
*Hylococcum splendens*, elemental composition, 2631  
in-situ Hg speciation in flue gas by liquid and solid sorption systems, 821  
leaded petrol, polychlorinated dibenzofurans and dioxins in exhaust fumes of cars, 29  
marine animals, soluble organoarsenic compds, microbial degradation of arsenobetaine, 2545  
marine microorganisms, formation of trimethylarsine oxide from arsenobetaine, 2551  
metal fallout, perennial herbs as monitors, 233  
Ni poisoning of rats, effect of chelating drugs on pharmacokinetic and metabolic disposition, 259  
organoarsenic compds in fish and algae, exact mass measurement using fast atom bombardment mass spectrometry, 91  
oxygenated aqueous suspensions of  $\text{TiO}_2$ , sunlight degradation of 2,4,5-trichlorophenoxyacetic acid and 2,4,5-trichlorophenol, 1165  
Pb concentrations in vegetation in Irwell valley, England, 1105  
Pb distribution in roadside ecosystems, evaluative model, 1387  
Pb distribution in roadside ecosystems, evaluative model, 1387  
photo-degradation of chloronitrobenzenes in aqueous soil in presence of  $\text{TiO}_2$ , 809  
*Scenedesmus obliquus*, naphthalenesulphonic acids as source of sulphur, 1565  
silicones in aquatic environment, oxidative photoinduced

degradation, 2567  
 tin distribution in northeastern Mediterranean, 429  
 $TiO_2$ , aqueous suspensions, photocatalytic degradation of toxic organic compds, CIR-FTIR interfacial analysis, 1447  
 Ti, comparative toxicity to two plant species, 929  
 tributyltin chloride present in sea water, solid phase extraction, GC separation and EC detection, 61  
 tributyltin, exposure of marine bivalves, sub-lethal growth effects and mortality, 201

**Micelles**  
 partition coeffs of tetrachlorobenzene isomers between water and sodium dodecylsulphate micelles, enhanced toxicity and tissue accumulation of 1,2,4,5-isomer not related to its lipophilicity, 803

**Microorganisms** see also **Bacteria**  
 benthic organisms and sediment physicochemical properties in polluted stream, effect of high levels of polycyclic aromatic hydrocarbons, 1053  
 biodegradability of hexamethylenetetramine, 1555 dissolved and dispersed hydrocarbons, long-term impact in gulf of Isenkeren, 381  
 marine microorganisms, formation of trimethylamine oxide from arsenobetaine, 2551  
 microbial degradation of guanidinium ion, 1071  
 veratrylglycerol-8-2,4-dichlorophenyl ether, model for lignin bound residues by *Phanerochaete chrysosporium*, *Corynebacterium equi* and photosensitised riboflavin, stereospecificity of degradation, 1137  
 zooplankton under outdoor conditions, effect of lindane, 1527

**Mineralisation**  
 and sediments in northeastern Mediterranean, tin in sea water, 429  
 atrazine effect on mineralisation of n-dodecylbenzene sulphonate -  $^{14}C$  in soil, 1521

**Models**  
 2,4,6-trichlorophenol, aquatic environmental, evaluation with mathematical model, 2531  
 chlorinated anisoles and veratroles in fish, instrumental and sensory detn, 1231  
*Daphnia magna*, a predictive structure-toxicity model, 1149  
 evaluative model, Pb distribution in roadside ecosystems, 1387  
 humic-, monomers, environmental photolcorporation of polychlorobenzenes, 495  
 plants, fate of lipophilic compds, estimation with multimedia compartment model, 2653  
 TCDD distribution on all territory around Seveso, use in epidemiology and hint into dynamical models, 1765  
 terrestrial plant biomass, use as parameter in fugacity model, 2359  
 wood preservation with azonazole, model experiments predicting aerial levels, 1281

**Mutagenesis**  
 artificially recharged ground water processed from humus rich surface water, effect of permanganate oxidation and chlorination on mutagenic activity and other qualities, 1489  
 mutagenic chemicals in soils, efficiency and two standardised procedures for extraction, 1243  
 mutagenicity investigations, aqueous sulphite-nitrite system, 2479  
 polycyclic aromatic hydrocarbons from water distribution pipes, comparison of mutagenicity and leaching, 2595

**Nitrates and Nitrites**  
 mutagenicity investigations, aqueous sulphite-nitrite system, 2479  
 pyrene in water containing nitrite ion, formation of 1-nitropurpuroene by photolysis, 859  
 water containing nitrite or nitrate ions, photoreaction of biphenyl, 1289

**Nitro compounds**  
 4-nitrophenol, phototransformation, quantum yield, 2213  
 chloronitrobenzenes, photodegradation in aqueous soln in presence of  $TiO_2$ , 809

**Nitrogen oxides**  
 erythrocyte membrane, nitrogen dioxide-induced damage, 2371  
 nitrogen dioxide, reactions with naphthalene in UV-light, 519  
 nitrogen oxide oxidation, kinetics by ozone and by oxygen, 537

**Nutrients**  
 and suspended matter, input into river Rhone Golfe du Lion, 417

**Oils**  
 crude oil identification with electrothermal-multiple wavelength absorption spectrometry, 983  
 from water pumps submerged in wells, health hazard from PCBs, 37  
 No 2 fuel oil, fish exposure, glucuronides from bile, comparison with aromatic and aliphatic n-alkyl glucuronides, 1387  
 olive oil extraction plants, waste water, soil pollution, 1557  
 PCDD and PCDF in motor oils and waste oils, analysis, 1649  
 PCDD and PCDF in motor oils, refined oils and contaminated soils, 1847

**Oxidation**  
 artificially recharged ground water processed from humus rich surface water, effect of permanganate oxidation and chlorination on mutagenic activity and other qualities, 1489  
 nitrogen oxide-, kinetics by ozone and by oxygen, 537

**Ozone**  
 and oxygen, kinetics of nitrogen oxide oxidation, 537  
 use in destruction of polychlorinated dibenz-p-dioxins and dibenzofurans in contaminated water, 1857  
 UV-ozonation as a waste disposal pretreatment of pesticides, 2321

**Partition coefficients**  
 $n$ -octanol/water, for quantitative structure-biodegradability relationships for alcohols, ketones and alicyclic compds, 695  
 $n$ -octanol-water, of organic environmental chemicals in humans, correlation with their bioconcentration potential, 239  
 octanol-water, using reverse phase high pressure liquid chromatography, 133  
 of tetrachlorobenzene isomers between water and sodium dodecylsulphate micelles, enhanced toxicity and tissue accumulation of 1,2,4,5-isomer not related to its lipophilicity, 803  
 sediment water, and HPLC retention factors of aromatic hydrocarbons, 109

**Pesticides**  
 2,4,5-trichlorophenoxyacetic acid and 2,4,5-trichlorophenol, sunlight degradation in oxygenated aqueous suspensions of  $TiO_2$ , 1165  
 and herbicides, controlled release formulations in freshwater systems, 615  
 and herbicides, photolysis of 2,3-dihydro-5,6-dimethyl-1,4-dithiin-1,1,4,4-tetroxide, 1319  
 bound  $^{14}C$ -fonofos residues, formation in soil and vegetables under field conditions, 167  
 carbofuran- $^{14}C$ , uptake by rice plants after root zone application as controlled release formulation, 1273  
 Kanechlor, arochlor and environmental samples, detn of non-ortho substituted, PCBs, 1631  
 lindane and atropine sulphate, effect on tissues of fish, a chronotoxicological approach, 1339  
 organo-Cl pesticides and polychlorinated biphenyls in human milk during lactation, 1301  
 organo-P pesticides, improved silica gel clean-up method, 1065  
 organochlorine insecticide residues in human fat and milk samples in S.Africa, 705  
 PCDDs and PCDFs, environmental fate, sources, levels and isomeric pattern in various matrices, 1603  
 phermedipham, photodegradation in aqueous soln, 513  
 phototoxicity, biological activity, occurrence and synthesis of phenylheptatriyne, 2405  
 plant foliage, accumulation and release kinetics, exposure to  $\alpha$ - and  $\gamma$ -HCH, p,p-DDT and DDE and PCB mixture, 2515  
 plants, fate of lipophilic compds, estimation with multimedia compartment model, 2653  
 residues, thermolysis during tobacco smoking, 521  
 terrestrial plant biomass, use as parameter in fugacity model, 2359  
 UV-ozonation as a waste disposal pretreatment, 2321

**Petroleum**  
 dissolved and dispersed hydrocarbons, long-term impact in gulf of Isekenderun, 381  
 pelagic tar, spatial and temporal variation in Mediterranean sea, 399

**Phenols**  
 2-biphenol, oxidative photocyclisation in dilute aqueous soln, 1205  
 2,4,5-trichlorophenol production, 2,3,7,8-TCDD, assessment of contamination, use facilities and waste disposal sites, 2175  
 2,4,6-trichlorophenol, aquatic environmental, evaluation with mathematical model, 2531  
 chlorinated anisoles and veratroles in fish, model compds, instrumental and sensory detn, 1231  
 chlorophenols, degradation with Fenton's reagent, 2225  
 creosote compds in snails from Pensacola bay, Florida near hazardous-waste site, 2397  
 cyanogen chloride, formation in reaction of monochlorinated, mononitrated or monocarboxylated benzenes, phenols and anilines with chloramine and polymethylphenols, polychlorophenols and polynitrophenols with chloramine, 2249  
 pentachlorophenol and sodium pentachlorophenol isomerspecific analysis for 2,3,7,8-substituted PCDD and PCDF at sub-ppb levels, 1759  
 pentachlorophenol degradation of lignin bond residues, veratryl-glycerol- $\beta$ -(pentachlorophenyl)ether as model, 963  
 pentachlorophenol in different human tissues, distribution and bioconcentration, 887  
 pentachlorophenol poisoning, levels of PCDDs and PCDFs in human tissues, 1989  
 phenol-oxidase activity from soil in La Laguna area, Spain, characterisation with bacteria, 2627  
 phenol, solution factors affecting adsorption onto silistone, 1431  
 phenols and other compds in water, rate constants for reactions with singlet oxygen, 681

**Phosphonates**  
 amnotinos(methylene phosphonate), degradability, sludge adsorption, mobility in soils and bioconcentration, 1323

**Photochemistry**  
 accelerated debromination of biphenyls by photolysis with sodium borohydride, 1013  
 aquatic microecosystems, method to assess periodic responses to photosynthetic inhibition, 287  
 CIR-FTIR interfacial analysis, photocatalytic degradation of toxic organic compds on TiO<sub>2</sub>, aqueous suspensions, 1447  
 degradation of betanal, different excited states and spectroscopic properties, 269  
 degradation of chloronitrobenzenes in aqueous soln in presence of TiO<sub>2</sub>, 809  
 dibenz-p-dioxin in organic solvents at 253.7 °K, products and GC/MS characterisation, 7 environmental incorporations of polychlorobenzenes into humic model monomers, 495  
 induced degradation of diphenylhydrazones in aqueous solvents, role of peroxy radicals, 19  
 induced formation of oxygen species and their reaction with organic chemicals in soln, 505  
 N-(dichloromethylthio) phthalimide a metabolite of folpet, 127  
 naphthalene, reactions with nitrogen dioxide in UV-light, 519  
 natural waters, reactivity of humic acid, 523  
 oxidative photocyclisation of 2-biphenol in dilute aqueous soln, 1205  
 pesticides, UV-ozonation as a waste disposal pretreatment, 2321  
 photo-induced toxicity of polycyclic aromatic hydrocarbons to fathead minnow larvae, 1395  
 photochemical aging of humic substances, 1463  
 photochemical experiments, use of Teflon bags, 1405  
 photolysis of 2,3-dihydro-5,6-dimethyl-1,4-dithiin-1,1,4,4-tetroxide, 1319  
 photoreaction of biphenyl in water containing nitrite or nitrate ions, 1289  
 pyrene in water containing nitrite ion, formation of 1-nitropurene by photolysis, 859  
 pyrene toxicity in fish, synergism by piperonyl butoxide and by UV light, 2291  
 rate constants for reactions of singlet oxygen with phenols and other compds in water, 681  
 silicones in aquatic environment, oxidative photoinduced degradation, 2567  
 sunlight degradation of 2,4,5-trichlorophenoxyacetic acid and 2,4,6-trichlorophenol in oxygenated aqueous suspensions of TiO<sub>2</sub>, 1165  
 toxicity, biological activity, occurrence and synthesis of phenylheptatriene, 2405  
 transformation of 4-nitrophenol, quantum yield, 2213

**Photosynthesis**  
 inhibitory activity-structure quantitative relationships in three carbamate series, 1347

**Plants**  
 conifer needles, atmospheric organic micropollutants, occurrence and distribution, 2647  
 Florida strawberry farms, dislodgable captan residues, 1257  
 mancozeb in air, determination, occupational exposure in control of potato late blight, 2423  
 perennial herbs as monitors of metal fallout, 233  
 plant foliage, accumulation and release kinetics, exposure to  $\alpha$ - and  $\gamma$ -HCH, p,p-DDT and DDE and PCB mixture, 2515  
 plants, fate of lipophilic compds, estimation with multimedia compartment model, 2653  
 rice plants, uptake of carbofuran-<sup>14</sup>C after root zone application as controlled release formulation, 1273  
 terrestrial plant biomass, use as parameter in fugacity model, 2359  
 two species, comparative toxicity of Ti, 929  
 vegetation changes and soil pollution due to heavy metals in sinter-pavements, 1021  
 vegetation in Irwell valley, England, Pb concentrations, 1105  
 watercourse pollution, sources in Italy and mediterranean France, assessed by macrophytes, 331

**Plastics**  
 bisphenol, degradation in natural waters, 1501

**Pollutants**  
 and problems in Marmara sea, 339  
 brominated flame retardants, ubiquitous environmental pollutants? 2343  
 carbon tetrachloride destruction in stoichiometric CH<sub>4</sub>/CCl<sub>4</sub>/air premixed flat flame, 989  
 chain-saw exhaust, new strategy for monitoring exposure, 99  
 charge-transfer interaction with dissolved humic materials, binding interaction between these and chloranil, 1115  
 combustion, formation of brominated aromatics, 2451  
 conifer needles, atmospheric organic micropollutants, occurrence and distribution, 2647  
 dibenzodioxins and dibenzofurans, brominated and brominated/chlorinated, potential environmental contaminants, 1873  
 erythrocyte membrane, nitrogen dioxide-induced damage, 2371  
 organic environmental chemicals in humans, n-octanol-water partition coeffs, correlation with their bioconcentration potential, 239  
 organic micro-, emission during waste incineration, 813  
 PCDDs, monitoring in Osaka bay using blue mussel, 1817  
 persistent environmental chemicals, bio-indicators for monitoring the spread, 225  
 phenol, solution factors affecting adsorption onto silistone, 1431  
 potential environmental PCDFs and mixed bromo/chloro compds, NCI mass spectrometry for detection and screening, 713  
 separation by ion flotation, 623  
 trichlorofluromethane, residence time in polyurethane foams, variability, trends and effects of temp, 759

**Pollution**  
 2,3,7,8-TCDD, assessment of contamination at 2,4,5-trichlorophenol production, use facilities and waste disposal sites, 2175  
 2,3,7,8-tetrachlorodibenzo-p-dioxin long-term study of ecosystem contamination, 1791  
 Cd and Hg, interactive effect on allomeric polymorphism in *Cerithium scabridum*, 543  
 dioxin Missouri update, 1986, 1869 due to heavy metals in sinter-pavements, changes in vegetation and soil, 1021  
 environmental- impact on life in Mediterranean, opening address of 3rd international congress, 311  
 heavy metal-, in Guadiana river and Guadalquivir estuary, 463  
 heavy metal-, in rivers and lakes of northern Greece, 455  
 impact on copepod community of eastern Adriatic coast, 369  
 olive oil extraction plants, waste water, soil pollution, 1557  
 organic-, correlation of some

factors in water systems in northern Greece, 395

Pb distribution in roadside ecosystems, evaluative model, 1387

PCBs,  $\alpha$ - and  $\gamma$ -hexachlorocyclohexane, 4,4'-DDE and 4,4'-DDT in continental air, 2497

research and monitoring, coordinated programme for Mediterranean, 633

seawater-, and morbidity among bathers on Mediterranean beaches of Israel, 565

terrestrial plant biomass, use as parameter in fugacity model, 2359

watercourse-, sources in Italy and mediterranean France, assessed by macrophytes, 331

wood burning, diurnal variations in Canada, 155

wood preservation with azaconazole, model experiments predicting aerial levels, 1281

**Poly(cyclic aromatic compounds)**

benz[a]anthracene, biogeochemistry at sediment water interface, 2429

fluoranthene, light-dependent cytotoxicity, oxygen-dependent membrane damage, 2417

halogenated polycyclic aromatic hydrocarbons, analysis in air, snow and automobile exhaust, 2441

polycyclic and polyhalogenated compds, formation and emission from municipal waste incinerators, 143

polycyclic aromatic hydrocarbons from water distribution pipes, comparison of mutagenicity and leaching, 2595

polycyclic aromatic hydrocarbons, bioavailability from coal-derived solid product, leaching study, 2613

**Polymers**

Teflon bags, use in photochemical experiments, 1405

**Polymorphism**

allozyme polymorphisms in *Cerithium scabridum*, interactive effects of Cd and Hg pollution, 543

**Proteins**

2,3,7,8-TCDD, AHH induction activity, effects of receptor modulators in C57BL/6 and DBA/2 mice, 1687

Ah receptor binding of substituted aryl hydrocarbons, a QSAR analysis, 1719

binding protein for PCB-metabolite, characterisation in bronchoalveolar lavage from healthy smokers and non-smokers, 1667

chlorinated dioxins and related compds, intracellular high-affinity binding proteins, 2187

dioxin receptor, structure and function, DNA-binding protein similar to steroid hormone receptor, 1681

PCB methyl sulphones, physico-chemical and immunological characterisation of a binding protein, 1677

trichlorofluoromethane, residence time in polyurethane foams, variability, trends and effects of temp, 759

**Pyrolysis**

1,2,3,4-tetrabromodibenzodioxin pyrolysis, Cl-Br exchange with chlorine donors, 1579

halogenated diphenyl ethers, biphenyls and plastic mixtures of these compds, formation of PBDF and PBDD, 277

halogenated flame retardants, pyrolysis and GC/MS analysis in on-line operation, 1353

of polybrominated diphenyl ethers, -biphenyls, dibenzodioxins and dibenzofurans, PVC-induced Cl-Br exchange, 297

**Radicals**

peroxy-, role in photo-induced degradation of diphenylhydrazones in aqueous solvents, 19

photodegradation of betanal, different excited states and spectroscopic properties, 269

**Reagents**

degradation of chlorophenols with Fenton's reagent, 2225

toxicity of alkylating agents, alternative for nitrobenzylpyridine test, 2365

**Receptors**

2,3,7,8-TCDD, AHH induction activity in C57BL/6 and DBA/2 mice, effect of receptor antagonist, 1,3,6,8-tetra-chlorodibenzofuran, 1739

2,3,7,8-TCDD, AHH induction activity, effects of receptor modulators in C57BL/6 and DBA/2 mice, 1687

Ah receptor, binding of substituted aryl hydrocarbons, a QSAR analysis, 1719

chlorinated dioxins and related compds, intracellular high-affinity binding proteins, 2187

dioxin receptor, structure and function, DNA-binding protein similar to steroid hormone receptor, 1681

rats, role of Ah receptor in mediating down regulation of uterine and hepatic estrogen receptor levels, 1691

[<sup>3</sup>H] TCDF synthesis and characterisation as a radio-ligand for Ah receptor, 1733

**Sediments**

and fresh water and estuarine water, biotic and abiotic degradation rates of methyl parathion, 1509

benz[a]anthracene, biogeochemistry at sediment water interface, 2429

chlorinated hydrocarbons in sediments of Elbe river and estuary, 2487

contaminated Wisconsin river-, bioavailability of PCDDs and PCDFs to fresh water fish, 667

heavy metals from municipal runoff to sediments of lake Pontchartrain, Louisiana, 2579

PCDDs in water, sediments and fish of Kupa river, Yugoslavia, 2351

PCDDs and PCDFs in air, particulates, sediments and soil, 1775

physicochemical properties and benthic organisms in polluted stream, effect of high-levels of polycyclic aromatic hydrocarbons, 1053

polybrominated biphenyl ethers in marine fish, shellfish and river and marine sediments, 2389

samples collected from Iskenderun bay, Hg and Sn in, 445

sediment-water partition coeff's and HPLC retention factors of aromatic hydrocarbons, 109

sedimentation of 74 PCB congeners in upper Hudson river, 733

**Seawage**

activated sludge, algae and fish, concentration factors, environmental hazard profile of <sup>14</sup>C labelled organic compds, 589

aminotriis(methylene phosphonate), degradability, sludge adsorption, mobility in soils and bioconcentration, 1323

disposal, bacteriological contamination in eastern part of gulf of Trieste, 551

PCDDs and PCDFs, fate, sources, levels and isomeric pattern in various matrices, 1603

sewage sludge burning incinerator, emission of chlorinated organics, 1895

**Soil**

2,3,7,8-TCDD, estimation of human exposure, 1851

aerobic and anaerobic soil, biomineralisation rates of <sup>14</sup>C-labelled organic chemicals, 1031

air, water and soil, release of organic chemicals, 117

aminotriis(methylene phosphonate), degradability, sludge adsorption, mobility in soils and bioconcentration, 1323

atrazine, analysis in underground waters in parts per trillion levels, early warning method for contamination and soil distribution, 1425

bacteria, characterisation with phenol-oxidase activity from soil in La Laguna area, Spain, 2627

bound <sup>14</sup>C-fonofos residues, formation in soil and vegetables under field conditions, 167

degradation of bromacil, diuron and chlorotoluron, 1003

dioxin congener profiles near combustion sources, evaluation of potential governing mechanisms, 1095

from central and southern Wales, PCB concentrations, 1583

in Irwell valley, England, Pb concentrations in vegetation, 1105

mineralisation of n-dodecylbenzene sulphone-<sup>14</sup>C in soil, effect of atrazine, 1521

mutagenic chemicals in soils, efficiency and two standardised procedures for extraction, 1243

near combustion sources, PCDDs and PCDFs in motor oils, refined oils and contaminated soils, 1847

PCDDs and PCDFs in air, particulates, sediments and soil, 1775

peat soil, Hg leaching, 1215

pollution and vegetation changes due to heavy metals in sinter-pavements, 1021

pyrethroid insecticides, persistence in soil before and

after formulation, 1311  
south Swedish soils, changes in acidity and cation pools between 1949 and 1985, 2239

TCDD contaminated soil, animals exposure, potential residues in derived foods, 2123  
volatility of TCDD and PCB, 907

**Solvents**  
organic-, photochemistry of dibenz-p-dioxin at 253.7 nm, products and GC/MS characterisation, 7

**Spectrometry and Spectroscopy**  
aromatic and aliphatic n-alkyl glucuronides, synthesis and comparison with glucuronides from bile of fish exposed to 2 fuel oil, 1381  
chloridazone, adsorption by montmorillonite, 937  
chromatographic separation and identification of PCDD/PCDF isomers by CI and EI mass spectrometry, 1625  
crude oil identification with electrothermal-multiple wavelength absorption spectrometry, 983  
electrophilic bromination of dibenz-p-dioxin, 1661  
high resolution emission-, new analysis of aromatic polycyclic hydrocarbons in environmental samples, 485  
mussels, identification of volatile organic components, 2559  
organosarcin compds in fish and algae, exact mass measurement using fast atom bombardment mass spectrometry, 91  
PCB methylsulphone, synthesis, differences in mass and PMR spectroscopy, 2299  
PCBs synthesis, structural characteristics of 2,3,6,7-TCBP and analysis for PCBs in human adipose tissue by NCI mass spectrometry, 2057  
PCDFs, detn in surface water by liquid chromatography using on-line sample preconcentration and different spectroscopic techniques, 1123  
PCDF metabolites, synthesis and mass spectral properties, 1641  
photochemistry of dibenz-p-dioxin in organic solvents at 253.7 nm, products and GC/MS characterisation, 7  
photodegradation of betanal, different excited states and spectroscopic properties, 269  
tetrachlorobenzene-related compds, synthesis, characterisation and chromatography, 2467  
tetrachlorobenzurans, gas chromatographic and spectrometric characteristics, 1655

**Steroids**  
dioxin receptor, structure and function, DNA-binding protein similar to steroid hormone receptor, 1681

**Structure-Activity relationship**  
dibenz-p-dioxins, polybrominated and chlorinated, synthesis, biologic and toxic effects and structure-activity relationships, 1729  
tripearametric equation to describe QSARs for heterogeneous chemicals, 1043

**Sulphur compounds**  
mutagenicity investigations, aqueous sulphite-nitrite system, 2479  
N-(dichloromethylthio) phthalimide a photo-metabolite of folpet 127  
PCB, hydroxymethylsulphone metabolites in Yusho patients, 2033  
*Scenedesmus obliquus*, naphthalenesulphonic acids as source of sulphur, 1565

**Surfactants**  
betanal, photodegradation, different excited states and spectroscopic properties, 269

**Suspended matter**  
and nutrients, imput into river Rhone Golfe du Lion, 417

**Techniques**  
aquatic microecosystems, method to assess periodic responses to photosynthetic inhibition, 287  
biodegradation tests for poorly soluble compds, 833  
biodegradability assessment, toxicity evaluation of substances, 2259  
BOD<sub>5</sub>, determination of biodegradation of alcohols and ketones, 695  
chlorinated dioxins, comparison of risk assessments by A.D.I.-values and by incremental cancer risk estimates, 2141  
chlorinated residues, valorisation via high temp incineration and recovery of HCl and energy, 1929  
crude oil identification with electrothermal-multiple wavelength absorption spectrometry, 983  
Hg and methyl mercury in scalp hair of inhabitants from Mediterranean areas, 877  
*in-situ* Hg speciation in flue gas by liquid and solid sorption systems, 821  
incinerator testing and evaluation programme, air pollution control technology in Canada, 1923  
ketones, vapour pressure and gas-film coeffs, 69  
municipal waste incineration technology, 2199  
mussels, identification of volatile organic components, 2559  
mutagenic chemicals in soils, efficiency and two standardised procedures for extraction, 1243  
non-ortho substituted PCBs, detn in Kanechlor, arochlor and environmental samples, 1631  
organop-P pesticides, improved silica gel cleanup method, 1065  
PCDFs, detn in surface water by liquid chromatography using on-line sample preconcentration and different spectroscopic techniques, 1123  
phenol, solution factors affecting adsorption onto limestone, 1431  
pollutants, separation by ion flotation, 623  
polychlorinated biphenyl congeners, fingerprint in samples of human subcutaneous adipose tissue, 2315  
polychlorinated biphenyl residues in fish and shellfish in Taipei, 1835  
polychlorinated dibenzo-p-dioxins and dibenzofurans in wastes of technical hexachlorocyclohexane, 1829  
prediction of ecotoxicological activity by sediment-water partition coeffs and HPLC retention factors of aromatic hydrocarbons, 109  
soils near combustion sources, PCDDs congener group profiles, simulation and evaluation of potential physical and mass transfer phenomena, 1841  
transmission and scanning microscopic characterisation of mouse hep a 1 hepatoma cells after treatment with 2,3,7,8-tetrachloro-p-dibenzodioxin, 1713  
tributyltin chloride present in sea water, solid phase extraction GC separation and EC detection, 61  
watercourse pollution, sources in Italy and mediterranean France, assessed by macrophytes, 331

**Technology**  
German national research centers, 605

**Tests**  
biodegradation tests for poorly soluble compds, 833

**Theoretical studies**  
cypermethrin, environmental distribution and fate, prediction, 1373

**Thermalysis**  
pesticide residues during tobacco smoking, 521

**Tissues and Tissue fluids**  
2,3,7,8-TCDD, human exposure, inhalation via emissions and ingestion via cow's milk, 2079  
accumulation and enhanced toxicity of 1,2,4,5-isomer of tetrachlorobenzene not related to its lipophilicity, 803  
adipose tissue in normal subjects, levels of polychlorinated quaterphenyl congeners, 1419  
adipose tissue of U.S. veterans from Vietnam war, elevated levels of 2,3,7,8-tetrachloro-dibenzodioxin, 1997  
bronchoalveolar lavage from healthy smokers and non-smokers, characterisation of binding protein for PCB-metabolite, 1667  
Co distribution on cells, protective effect of different envelopes, marine bacterial investigation, 2623  
chlorodibenzo-p-dioxins in feral pigeons, 1745  
different human-, distribution and bioconcentration of pentachlorophenol, 887  
erythrocyte membrane function, effect of sodium fluoride, reference to metal ion transport in rabbits, 1087  
erythrocyte membrane, nitrogen dioxide-induced damage, 231  
Hg and methyl mercury in scalp hair of inhabitants from Mediterranean areas, 877  
human adipose tissue, analysis for PCBs by NCI mass spectrometry, PCBs synthesis, structural characteristics of 2,3,6,7-TCBP, 2057  
human adipose tissue, detn of 2,3,7,8-TCDD, on whole weight and lipid bases, 935

human adipose tissue, TCDD levels distribution, statistical evaluations reflect misleading interpretations, 2135

human breast milk from Vietnam and USA, comparison of polychlorinated dibenzo-p-dioxin and dibenzofuran levels, 2003

human fat sampling for dioxin analysis, 2063

human milk during lactation, presence of organo-Cl pesticides and polychlorinated biphenyls, 1301

human milk from West Germany, presence of polychlorinated dibenzodioxins and dibenzofurans, 1983

human milk, presence of chlorinated dioxins and dibenzofurans, health hazard assessment, 2147

human mother's milk, interactive effects of PCDDs and PCDFs, 1701

human subcutaneous adipose tissue, polychlorinated biphenyl congener fingerprint in samples, 2315

human tissue levels of dioxins and furans, 2195

human tissues and food in Japan, levels of PCDDs and PCDFs, 2047

human tissues, levels of PCDDs and PCDFs after pentachlorophenol poisoning, 1989

membrane damage, oxygen-dependent, and light-dependent cytotoxicity of fluoranthene, 2417

membrane permeation of hydrophobic compds, effect on biodegradation kinetics, 1361

mouse hep G hepatoma cells, transmission and scanning microscopic characterisation after reagent with 2,3,7,8-tetrachloro-p-dibenzodioxin, 1713

muscle of British fresh water fish, presence of Hg, Pb and Cd, 901

of fish, effect of lindane and atropine sulphate, a chrotoxicological approach, 1339

PCB methyl sulphones, physicochemical and immunochemical characterisation of a binding protein, 1677

PCDDs and PCDFs, environmental fate, sources, levels and isomeric pattern in various matrices, 1603

PCDDs and PCDFs, levels in samples of human origin and food in federal republic of Germany, 1977

polychlorinated dibenzo-p-dioxins and dibenzofurans, levels in persons with high and normal levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin, 2027

rat liver, subcellular distribution of 2,3,7,8-pentachlorodibenzo-p-dioxin, 1695

rats, role of Ah receptor in mediating down regulation of uterine and hepatic estrogen receptor levels, 1691

target cells and tissues in different species, identification of PCB methyl sulphones and related compds, 1671

tissues of normal and Yusho patients, presence of polychlorinated PCDF congeners, 2039

tissues of Yusho patients from Japan and China, comparison of PCDDs and PCDFs, 2017

**Tobacco**

bronchoalveolar lavage from healthy smokers and non-smokers, characterisation of binding protein for PCB-metabolite, 1667

thermolysis of pesticide residues, during smoking, 521

**Toxicity**

biodegradability assessment, toxicity evaluation of substances, 2259

boron levels in ground waters of Halkidiki, 419

comparative, of Tl to two plant species, 929

*Daphnia magna*, a predictive structure-toxicity model, 1149

dioxins and dibenzofurans, recent findings and comments on pharmacokinetic, biochemical effects and animal toxicology, 2191

enhanced toxicity and tissue accumulation of 1,2,4,5-isomer of tetrachlorobenzene not related to its lipophilicity, 803

fluoranthene, light-dependent cytotoxicity, oxygen-dependent membrane damage, 2417

Hg and methyl mercury in scalp hair of inhabitants from Mediterranean areas, 877

lindane and atropine sulphate, effect on tissues of fish, a chrotoxicological approach, 1339

PCB congener analysis, critical evaluation of toxic levels in biota, 2585

photo-induced toxicity of polycyclic aromatic hydrocarbons to fathead minnow larvae, 1395

phototoxicity, biological activity, occurrence and synthesis of phenylheptatriyne, 2105

polybrominated and chlorinated dibenzo-p-dioxins, synthesis, biologic and toxic effects and structure-activity relationships, 1729

pyrene toxicity in fish, synergism by peronyl butoxide and by UV light, 2291

tetrachlorobenzene-related compds, synthesis, characterisation and chromatography, 2467

toxic coplanar PCBs in biota, occurrence and distribution, 1965

toxicity of alkylating agents, alternative for nitrobenzylpyridine test, 2365

triaximetric equation to describe QSARs for heterogeneous chemicals, 1043

**Toxins**

1,2,4,5,7,8-hexachloranthene, measurement and significance in environment, 869

aqueous microecosystems, method to assess periodic responses to photosynthetic inhibition, 287

Hg and Sn in gulf of Iskenderun, 445

*in vitro* induction of AHH by 2,3,7,8-TCDD and related toxic halogenated aryl hydrocarbons in rat hepatoma cells for quantitative detn of toxins, 791

microbial degradation guanidinium ion, 1071

mutagenicity investigations, aqueous sulphite-nitrite system, 2479

**Transformers**

fires involving PCB transformers and capacitors, formation of chlorinated combustion products, 1881

PCB transformer incident, Binghamton state office, 1981-1987, 2155

**Transport**

organic waste-, lignin residues as tracers, 171

**Vapour pressure**

bound <sup>14</sup>C-fonofos residues, formation in soil and vegetables under field conditions, 167

**Volatilisation**

mussels, identification of volatile organic components, 2559

vapour pressures and gas-film coeffs of ketones, 69

volatility of YCDD and PCB in soil, 907

**Wastes**

2,3,7,8-TCDD and PCDDs, evaluation in fly ash from refuse incinerators, 1865

2,3,7,8-TCDD, assessment of contamination at 2,4,5-trichloro-phenol production, use facilities and waste disposal sites, 2175

chlorinated residues, valorisation via high temp incineration and recovery of HCl and energy, 1929

combustion, emission and chlorination pattern of PCDD/PCDF, 1221

coordinated programme for research and monitoring of pollution in Mediterranean, 633

creosote compds in snails from Pensacola bay, Florida near hazardous-waste site, 2397

halogenated organic acids, characterisation in flue gases from municipal incinerators, 1181

incineration, emission of organic micropollutants, 813

incineration, guidelines based on theory and practise, 1943

*in-situ* Hg speciation in flue gas by liquid and solid sorption systems, 821

lipophilic volatile organohalogen compds, formation during laboratory chlorination of ground water samples from Yugoslavia, 2279

municipal incinerators, formation and emission of polycyclic and polyhalogenated compds, 143

municipal waste incineration technology, 2199

new MSW incinerators, experiences from Sweden, 1937

organic-, transport, lignin residues as tracers, 171

PCB liquid waste incinerators, measurement of combustion products, 1889

PCDD/PCDF, formation in fly ash from waste incinerators, 1917

pesticides, UV-ozonation as a waste disposal pretreatment, 2321

**Mater**

- air, water and soil, release of organic chemicals, 117
- and sodium dodecylsulphate micelles, partition coeffs of tetrachlorobenzene isomers, enhances toxicity and tissue accumulation of 1,2,4,5-isomer not related to its lipophilicity, 803
- artificially recharged ground water processed from humus rich surface water, effect of permanganate oxidation and chlorination on mutagenic activity and other qualities, 1489
- benz[a]anthracene, biogeochemistry at sediment water interface, 2429
- environmental conditions in Abu Kir bay, physico-chemical characteristics and water circulation, 361
- ground waters of Halkidiki, boron levels in, 419
- lipophilic volatile organohalogen compds, formation during laboratory chlorination of ground water samples from Yugoslavia, 2279
- olive oil extraction plants, waste

water, soil pollution, 1557

PCDFs, detn in surface water by liquid chromatography using on-line sample preconcentration and different spectroscopic techniques, 1123

polychlorinated dibenz-p-dioxins and dibenzofurans, destruction in contaminated water using ozone, 1857

polycyclic aromatic hydrocarbons from water distribution pipes, comparison of mutagenicity and leaching, 2595

pumps submerged in wells, health hazard from PCBs in pump oil, 37

rate constants for reactions of singlet oxygen with phenols and other compds, 681

samples, detn of phenoxy acid herbicides, 527

sediment-water partition coeffs and HPLC retention factors of aromatic hydrocarbons, 109

sorption of hydrophobic chemicals from water, hypothesis for mechanism of particle concentration effect, 745

underground waters, atrazine analysis in parts per trillion levels, early warning method for contamination and soil distribution, 1425

**Wood**

- burning, diurnal variations of pollution in Canada, 155
- lignin bound pentachlorophenol residue degradation, veratryl-glycerol- $\beta$ -(pentachlorophenyl)ether as model, 963
- lignin bound residues, veratrylglycerol- $\beta$ -2,4-dichlorophenyl ether as model by *Phanerochaete chrysosporium*, *Corynebacterium equi* and photosensitised riboflavin, stereospecificity of degradation, 1137
- lignin residues as tracers of organic waste transport, 171
- preservation with azaconazole, model experiments predicting aerial levels, 1281

**Xanthenes**

- 1,2,4,5,7,8-hexachloroxanthene, measurement and significance in environment, 869

**Xenobiotics**

- biotransformation kinetics in natural waters by aufwuchs communities, 49
- xenobiotic conjugates, synthesis and  $^{13}\text{C}$  NMR analysis, 1381

# AUTHOR INDEX 1987

Abernathy A.R. see Nicholas W.D. 287  
 Agelidis T see Pytianos K. 455  
 Agursky T see Fattal B. 565  
 Ahlbom U.G., Wæren F. and Måkansson H. Interactive effects of PCDDs and PCDFs occurring in human mother's milk, 1701  
 Al-Saade M. Contribution of Kuwait foundation for the advancement of sciences toward environmental research, 651  
 Alia-Peljari T see Vartiainen T. 1489  
 Alif A., Boule P. and Lemire J. Comportement photochimique du nitro-4' phenol en solution aqueuse, 2213  
 Alley C.C. see Barnhart E.R. 2057, see Needham L.L. 2027  
 Allus M.A., Martin M.H. and Nickless G. Comparative toxicity of thallium to two plant species, 929  
 Alisberg U. see Haglund P. 2441, see Selström U. 945  
 Aliston D see Jones K.H. 2183  
 Ambe Y see Yokouchi Y. 1143  
 Anderson C., Hochgeschneider K., Weidemann H. and Wilmes R. Studies of the oxidative photo-induced degradation of silicones in the aquatic environment, 2567  
 Anderson M.A. see Tunisi E. 1447  
 Andersson O., Lund J. and Ripe E. A binding-protein for the PCB-metabolite 4,4'-bis(methylsulfonyl)-2,2',5,5'-tetrachlorobiphenyl: characterization in bronchoalveolar lavage from healthy smokers and non-smokers, 1667  
 Andersson R see Rappe C. 1603  
 Andrews J see Needham L.L. 2027  
 Apostolopoulos A see Voulgaropoulos A. 395  
 Arghezanti S see Schecter A. 1997  
 Arms A.D. see Travis C.C. 117  
 Artuz M.I. see Baykut F. 339  
 Arvanitoyannis I., Kleftheriadis I. and Kavleentis E. Treatment of dye-containing effluents with different bentonites, 2523  
 Asada S., Matsushita H., Morita M. and Hamada Y. Determination of chlorodibenzodioxins and chlorodibenzofurans discharged from several municipal incinerators in Japan, 1907  
 Asahi M see Nagayama J. 2073, see Takenaka S. 1419  
 Asahi M. and Urabe H. A case of "Yusho"-like skin eruptions due to halogenated PCB-analogue compounds, 2069  
 Ashley D.L. see Barnhart E.R. 2057  
 Alander O. and Modig S. programme for action in Sweden to limit emissions of PCDDs and PCDFs from waste-to-energy plants, 1911  
 Asplund L see Jansson B. 2343  
 Astles D.J., Pearce R., Griller D., Schwartz H.M. and Villeneuve D.C. Partition coefficients of tetrachlorobenzene isomers between water and sodium dodecylsulfate micelles: relation to toxicity, 803  
 Athar M see Misra M. 259  
 Autio S see Lodenius M. 1215  
 Aydin A see Baykut F. 339  
 Bacci E see Calamari D. 2359  
 Bacci E., Calamari D., Gaggi C. and Vighi M. An approach for the prediction of environmental distribution and fate of cypermethrin, 1373  
 Bacci E. and Gaggi C. Chlorinated hydrocarbon vapours and plant foliage: kinetics and applications, 2515  
 Badsha K.S. see Eduljee G.H. 1583, see Fielding A.H. 1105  
 Bayby R see Needham L.L. 2027  
 Bagatari R see Davoli E. 1425  
 Bahadir M see Lorenz W. 521, see Ozynski K. 225  
 Bahadir M., Lorenz W. and Korte F. Einfluss unterschiedlicher Formulierungen auf die Stabilität und insektizide Wirkungen von Pyrethrinden im Boden, 1311  
 Bahadir M. Safe formulations of agrochemicals, 615  
 Bahadir M. and Pfister G. Uptake of carbofuran-<sup>14</sup>C by rice plants after root zone application as a controlled release formulation, 1273  
 Bahig M.E. see Scheunert I. 1521  
 Baker G.A. see Wiersma G.B. 2631  
 Bakthavathsalam R., Ravikumar G. and Balasubramanian U. Effects of lindane and atropine sulphate on the tissues of the fish, *Anabas testudineus* (Bloch) - a chrono-toxicological approach, 1339  
 Balasubramanian U see Bakthavathsalam R. 1339  
 Ballschmiter K see Wittlinger R. 2497  
 Barnister R. and Safe S. The effects of receptor antagonists on the AHH induction activity of 2,3,7,8-TCDD in C57BL/6 and DBA/2 mice: 1,3,6,8-tetrachlorodibenzofuran, 1739  
 Barnister R., Kelley M. and Safe S. The effects of receptor modulators on the AHH induction activity of 2,3,7,8-TCDD in C57BL/6 and DBA/2 mice, 1687  
 Baroufi J.H. see Hellou J. 1381  
 Barbeni M., Minero C., Pelizzetti E., Borgarello E. and Serpone N. Chemical degradation of chlorophenols with Fenton's reagent ( $Fe^{2+} + H_2O_2$ ), 2225  
 Barbeni M., Morello M., Pazzaro E., Pelizzetti E., Vincenti M., Borgarello E. and Serpone N. Sunlight photodegradation of 2,4,5-trichlorophenoxy-acetic acid and 2,4,5-trichlorophenol on  $TiO_2$ . Identification of intermediates and degradation pathway, 1165  
 Bard D see Abraham L. 2129  
 Bargagli R., Bargigliani C. and Maseri B.E. Erratum, 3  
 Bargigliani C see Bargagli R. 3  
 Barlaas H. and Parlar H. Reactions of naphthalene with nitrogendioxide in UV-light, 519  
 Barnhart E.R., Patterson D.G., Jr., Ashley D.L., Alley C.C. and MacBrude J.A.H. Synthesis of polychlorinated biphenyls (PCBs); structural characterization of 2,3,6,7-TCB; and analysis for PCBs in human adipose tissue by negative-ion chemical ionization (NCI) mass spectrometry, 2057  
 Basu D.K., Saxena J., Stoss F.W., Santodomingo J., Neal M.W. and Kopfler F.C. Comparison of drinking water mutagenicity with

leaching of polycyclic aromatic hydrocarbons from water distribution pipes, 2595

Batterman A.R. see Kuehl D.W. 657, 1372, 667

Baumann R.A., Blanco Gonzalez E., Frei R.W., Gooijer C. and Weithorst N.H. Determination of poly-chlorinated dibenzofurans in surface water by means of liquid chromatography using on-line sample preconcentration and different spectroscopic detection techniques, 1123

Baykur F., Aydin A. and Artiz M.I. Ecological situation of sea of Marmara, 339

Bélinger A. see Khan S.U. 167

Beck H., Eckart K., Kellert M., Mathar W., Mühl Ch.-S. and Wittkowski R. Levels of PCDFs and PCDDs in samples of human origin and food in the federal republic of Germany, 1977

Belli G. see Ratti S.P. 1765

Belser W.T. see Patterson D.G., Jr. 935

Bendixen E.L. and Nielsen P.R. A guideline for incineration of waste based on theory and practical experiences, 1943

Benedstad C., Jebens A. and Tveten G. Emission of organic micropollutants from waste incineration, 813

Benfenati E. see Davoli E. 1425

Bennett W.E., Maas J.L., Sweeney S.A. and Kagan J. Erratum, 5

Benoit F.M. see Schwartz H. 2467

Bepko M. see Kogi K. 2371

Bergman A. see Brandt T. 1671, see Haglund P. 2441, see Sellström U. 945

Bergqvist P.-A. see Rappe C. 1603

Bergström J. see Oberg T. 2451

Bergström J.G.T. see Oberg T. 1221

Bertazzi P.A. see Ratti S.P. 1765

Beyerle-Prüfer R. see Kotzias D. 1463

Blanco Gonzalez E. see Baumann R.A. 1123

Blok J. see de Morsier A. 833, see Reynolds L. 2259

Boethling R.S. see Vaishnav D.D. 695

Boggs G.U. see Vandell R.D. 973

Bond G.G. see Cook R.R. 2111, see Sobel W. 2095

Bond G.G., Cook R.R., Brenner F.E. and McLaren E.A. Evaluation of mortality patterns among chemical workers with chloracne, 2117

Bontinck W.J. see de Morsier A. 833, see Reynolds L. 2259

Boozier E.L. see Patterson D.G., Jr. 935

Borgarello E. see Barbetti M. 2225, 1165

Boule P. see Alif A. 2213, see Seffar A. 1205

Bourquin A.W. see Pritchard P.H. 1509

Boyd R.K. see Waddell D.S. 1655

Brandt T. and Bergman A. PCB methyl sulphones and related compounds: identification of target cells and tissues in different species, 1671

Braun H. see Metzger M. 821

Breitmayer J.-P. see Zsirger N. 921

Brenner F.E. see Bond G.G. 2117

Bressi G. see Ratti S.P. 1765

Bridle T. see Hay D.J. 1923

Brisk M.A. see Meijer M.E. 1115

Brohede C. see Rappe C. 1603

Brown D. and Hamburger B. The degradation of dyestuffs: Part III - investigations of their ultimate degradability, 1539

Brown K.W. see Maggard L.A. 1243

Brown M.P. see Bush B. 733

Brownson P.J. see Sobel W. 2095

Brunner H. see Hagermaler H. 1759

Bryan A.M. see Olafsson P.G. 2585

Budde W.L. see Stanker L. 1635

Buser H.-R. Brominated and brominated/chlorinated dibenzodioxins and dibenzofurans: potential environmental contaminants, 713

Buser H.-R. Brominated and brominated/chlorinated dibenzodioxins and dibenzofurans: potential environmental contaminants, 1873

Bush B., Sham L.A., Wahlen M. and Brown M.P. Sedimentation of 74 PCB congeners in the upper Hudson River, 733

Butte W. see Fooken C. 1301

Butherford B.C. see Kuehl D.W. 667, 657, 1372

Byrne A.R. see Dernelj M. 877

Byrne C.J. and DeLeon I.R. Contributions of heavy metals from municipal runoff to the sediments of Lake Pontchartrain, Louisiana, 2579

Calamari D. see Bacci E. 1373, see Vighi M. 1043

Calamari D., Vighi M. and Bacci E. The use of terrestrial plant biomass as a parameter in the fugacity model, 2359

Calmon J.-P. see TAILLANDIER G. 1347

Catallo W.J. and Gembrell R.P. The effects of high levels of polycyclic aromatic hydrocarbons on sediment physicochemical properties and benthic organisms in a polluted stream, 1053

Ceccherelli V.U., Galani V. and Ferrari I. Trophic state gradients and zooplankton and zoobenthos distribution in a PO river Delta lagoon, 571

Corlesi S. see Ratti S.P. 1765

Champon R. see Devillers J. 1149

Champon R. see Devillers J. 1149

Chan H.H. see Chou S.S. 1835

Chan K.-W. see Hoff R.M. 6

Chandra S. see Misra M. 29

Chastrette M. see Devillers J. 1149

Chittim B.G. see Safe S. 1723

Chittim B.G. see Waddell D.S. 1655

Chiu L., Li K., Thomas R.S. and Lao R.C. Chromatographic separation and identification of PCDD/PCDF isomers by CI and EI mass spectrometry, 1625

Chiu C., Halman R., Lanoy M., Li K., Lao R.C. and Poole G. Refined analytical procedures to detect and measure PCDD/PCDF, PAH, PCB, CB, and CP in environmental samples, 1619

Chou C.-S. see Dorn P.B. 1501

Chou S.S., Ho K.C. and Chan H.H. Routine determination of polychlorinated biphenyl residues in fish and shellfish in Taipei County, 1835

Choudhury G.G., van den Broecke J.A., Webster G.R.B. and Hutzinger O. Environmental photoincorporations of polychlorobenzenes into several humic model monomers, 495

Christmann W. see Rotard W. 1847

Christmann W., Rotard W., Littner A., Mann W., Reichert A., Reiss S. and Schinz V. Analytical procedure in the description of mineral oils and related matrices for PCDD and PCDF, 1649

Chu I. see Schwartz H. 2467

Civili F.S. and Jeticic L. The coordinated programme for research and monitoring of pollution in the Mediterranean, 633

Clément R.L. see Flatau G.N. 2623

Clement R.E., Tosine H.M., Osborne J., Ozvacic V., Wong G. and Thordyke S. Emissions of chlorinated organics from a municipal sewage sludge burning incinerator, 1895

Clement R.E. Municipal waste incineration technology Rapporteur's comments, 2199

Cookerham L.G. see Young A.L. 1791

Colquhoun K.O. see Smith A. 1555

Connell D.W. Age of PCB concentration relationship with the striped bass (*Morone saxatilis*) in the Hudson River and Long Island sound, 1469

Comett P. and Webster T. An estimation of the relative human exposure to 2,3,7,8-TCDD emissions via inhalation and ingestion of cow's milk, 2079

Constable J.D. see Schecter A. 2003, 1997

Constable J.D. and Schecter A. Human fat sampling for dioxin analysis, 2063

Cook P.M. see Kuehl D.W. 667, 657, 1372

Cook R.R. see Bond G.G. 2117, see Sobel W. 2095

Cook R.R., Bond G.G., Olson R.A. and Ott M.G. Update of the mortality experience of workers exposed to chlorinated dioxins, 2111

Coppock C. see Jones D. 1743

Cordón R. see Cabrera F. 463

Corominas E. see Garcia-Pareja M.P. 2627

Coutant R.W. see Edgerton S.A. 1475

Cripe C.R. see Pritchard P.H. 1509

Crummett W.B. see Nestrick T.J. 777

Cummings J.B., Korb B.R., Evans T. and Kravitz R.A. Assessment of 2,3,7,8-TCDD contamination at 2,4,5-trichlorophenol production and manufacturing use facilities and associated waste disposal sites, 2175

Cundy V.A., Morse J.S., Lester T.W. and Senser D.W. An investigation of a near - stoichiometric CH<sub>4</sub>/C<sub>2</sub>H<sub>6</sub>/air premixed flat flame, 989

Cuthill S. see Poellinger L. 1681

Czeskleba-Dupont R. A comparison of risk assessments for chlorinated dioxins by A.D.I.-values and by incremental cancer risk estimates, 2141

Davidson B.M. see Valkirs A.O. 201

Davoli E., Benfenati E., Bagnati R. and Fanelli R. Analysis of atrazine in underground waters at part per trillion levels as an early warning method for contamination and for soil distribution studies, 1425

De Kock A.C. and Lord D.A. A simple procedure for determining octanol-water partition coefficients using reverse phase high performance liquid chromatography (RPHPLC), 133

DeLeon I.R. see Byrne C.J. 2579

Deneer J.N., Simone T.L., Pauly J., Selmer W. and Hennens J.L.M. An alternative for the nitrobenzylpyridine test for the description of the toxicity of alkylating agents, 2365

Dennison J.W. see Travis C.C. 117

Denome M.A. see Mason G. 1729

Dernelj M., Horvat M., Byrne A.R. and Stegnar P. Mercury, methyl-mercury and selenium in scalp hair of inhabitants from Mediterranean areas, 877

Devereux T. see Lund J. 1677

Devillers J., Chambon P., Zakarya D., Chastrette M. and Chambon R. A predictive structure-toxicity model with *Daphnia magna*, 1149

Dich J see Wiklund K. 2107

Dobrowoliski see Janicki K. 253

Donnelly J.R see Munslow W.D. 1661, see Sovocool G.W. 221

Donnelly K.C see Maggard L.A. 1243

Dorgham M.M. see Osman M.M. 361

Dorgham M.M. and Osman M.M. Environmental conditions in Abu Kir Bay, East of Alexandria. II. Plankton distribution, downstream from landbased effluents, 559

Dorn P.B., Chou C.-S. and Gentempo J.J. Degradation of bisphenol A in natural waters, 1501

Drevengen V see Smit Z. 2351

Dueck Th.A., Endedijk G.J. and Ikkink H.G.K. Soil pollution and changes in vegetation due to heavy metals in sinter-pavements, 1021

Eder G., Sturm R. and Ernst W. Chlorinated hydrocarbons in sediments of the Elbe river and the Elbe estuary, 2487

Edgerton S.A., Khalil M.A.K. and Rasmussen R.A. Diurnal variations in residential woodburning pollution in Portland, Oregon, 155

Edgerton S.A., Coutant R.W. and Henley M.V. Hydrocarbon fuel spill dispersion on water: a literature review, 1475

Eduljee G. Volatility of TCDD and PCB from soil, 907

Eduljee G.H. and Townsend D.I. Evaluation of potential mechanisms governing dioxin congener profiles in soils near combustion sources, 1095

Eduljee G.H., Badsha K.S. and Munday K.J. PCB Concentrations in soil from central and Southern Wales, 1583

Eduljee G.H. and Townsend D.I. Simulation and evaluation of potential physical and mass transfer phenomena governing congener group profiles in soils near combustion sources, 1841

Egebick K.-E see Marklund S. 29

Eichelberger H see Scheeter A. 1713

Eisen H see Scheeter A. 1713

Eklund G., Pedersen J.R. and Strömberg B. Formation of chlorinated organic compounds during combustion of propane in the presence of HCl, 161

El-Habib H. and Golterman H.L. Input of nutrients and suspended matter into the Golfe du Lion by the river Rhône, 417

Eleftheriadis I see Arvanitoyannis I. 2523

Endedijk G.J. see Dueck Th.A. 1021

Engelhardt G see Preiss U. 963

Engler M see Scholz B. 1829

Eppling G.A., McVicar W. and Kumar A. Accelerated de bromination of biphenyls by photolysis with sodium borohydride, 1013

Ernst W see Eder G. 2487

Ernst W.H.O. and Leclerc S. Perennial herbs as monitor for moderate levels of metal fall-out, 233

Evans R.G. see Stehr-Green P. 2089

Evans T see Cummings J.B. 2175

Ewald M see Garrigues P. 485

Fanelli R see Davoli E. 1425

Farrell K. see Safe S. 1723

Farrell K., Safe L. and Safe S. [ $^3$ H]-2,3,7,8-Tetrachlorodibenzofuran (TCDF)-synthesis and characterization as a radioligand for the Ah receptor, 1733

Farrington J.W. see McElroy A.E. 2429

Fattal B., Peleg-Olevsky E., Agursky T. and Shoval H.I. The association between seawater pollution as measured by bacterial indicators and morbidity among bathers at Mediterranean bathing beaches of Israel, 565

Ferrari I see Ceccherelli V.U. 571

Fielding A.H., Li P.Y.F. and Badsha K.S. Lead concentrations in the vegetation of the Irwell valley in NW England, 1105

Filby W.G. see Kalus W.H. 2479

Finkelstein A see Hay D.J. 1923

Flatau G.N., Clément R.L., Mahdyoun F. and Gauthier M.J. Répartition du cadmium dans les enveloppes cellulaires d'une bactérie marine, 2623

Focardi S. and Romeo R. Fingerprint of polychlorinated biphenyl congeners in samples of human subcutaneous adipose tissue, 2315

Foeken C. and Butte W. Organochlorine pesticides and polychlorinated biphenyls in human milk during lactation, 1301

Freed V.H. see Madhun Y.A. 1003

Frei R.W. see Baumann R.A. 1123

Freitag D. Environmental hazard profile of organic chemicals. An experimental method for the assessment of the behaviour of organic chemicals in the environment, 589

Fries F. Assessment of potential residues in foods derived from animals exposed to TCDD-contaminated soil, 2123

Fürst P., Meekan H.-A., Kriger Chr. and Groebel W. Polychlorinated dibenzodioxine and dibenzofurans in human milk samples from Western Germany, 1983

Fujita T see Romkes M. 1719

Fukamachi K see Takenaka S. 1419

Fukui S see Kaise T. 91

Fukushima S see Miyata H. 1817

Fytianos K. see Voulgaropoulos A. 395

Fytianos K., Samanidou V. and Agelidis T. Comparative study of heavy metals pollution in various rivers and lakes of Northern Greece, 455

Gaggi C see Bacci E. 2515

Gaiani V see Ceccherelli V.U. 571

Gambrell R.P. see Cataldo W.J. 1053

Garcia de la Paz A.M. see Garcia-Pareja M.P. 2627

Garcia-Pareja M.P., Monteliva-Sánchez M., Garcia de la Paz A.M., Coronilas E., Perez M.L. and Ramos-Corveranza A. Characterization of bacteria with phenol-oxidase activity from soil in the La Laguna area (Spain), 2627

Garrigues P. and Ewald M. High resolution emission spectroscopy (Spol'skii effect): a new analytical technique for the analysis of polycyclic aromatic hydrocarbons (PAH) in the environmental samples, 485

Ganiewicz T.A. see Scheeter A. 2147

Gauthier M.J. see Flatau G.N. 2623

Geberoglu I see Oymox K. 225

Gentempo J. see Dorn P.B. 1501

Gericke P. see de Morsier A. 833, see Reynolds L. 2259

Geyer H.J., Scheunert I. and Korte F. Correlation between the bioconcentration potential of organic environmental chemicals in humans and their n-octanol/water partition coefficients, 239

Geyer H.J., Scheunert I. and Korte F. Distribution and bioconcentration potential of the environmental chemical pentachlorophenol (PCP) in different tissues of humans, 887

Gibson B see Stehr-Green P. 2089

Gierthy J.F. see Viswanathan T.S. 869

Giese J.P., Jr see Oris J.T. 1395

Gillmer M see Poellinger L. 1681

Glaumann H see Lund J. 1677

Golterman H see El-Habib H. 417

Gong H.-H. see Kagan J. 2417

Goijer C see Baumann R.A. 1123

Gounarisou X see Voulgaropoulos A. 395

Green V.E. see Needham L.L. 2027

Green S.E. see Wiersma G.B. 2631

Griest W.H. see Ma C.Y. 2613

Griller D. see Astles D.J. 803

Groebel W. see Fürst P. 1983

Gross M.L. see Scheeter A. 1997

Güloglu H see Parlak H. 19

Gustafsson J.-A. see Lund J. 1677, see Poellinger L. 1681

Hagenmaier H. and Brunner H. Isomer-specific analysis of pentachlorophenol and sodium pentachlorophenate for 2,3,7,8-substituted PCDD and PCDF at sub-ppb levels, 1759

Hagino T see Suzuki J. 859

Haglund P., Alsborg T., Bergman A. and Jansson B. Analysis of halogenated polycyclic aromatic hydrocarbons in urban air, snow and automobile exhaust, 2441

Hakansson H see Ahlborg U.G. 1701

Halmann R see Chiu C. 1619

Hamada Y see Asada S. 1907

Hamann R. and Kettner A. Determination of phenoxy acid herbicides in water samples, 527

Hansberg B. see Brown D. 1539

Hanacke K. see Kaise T. 2551, 91

Hanacke K., Matsumoto T., Tagama S. and Kaise T. Microbial degradation of arsenobetaine, the major water soluble organo-arsenic compound occurring in marine animals, 2545

Hansson M see Rappe C. 1603

Haraguchi K see Kuroki H. 2039, 1641

Haraguchi K., Kuroki H. and Masuda Y. Determination of hydroxy methylsulfone metabolites of PCB in Yusho patients, 2033

Haraguchi K., Kuroki H. and Masuda Y. Synthesis of PCB methylsulfone: some differences in mass and proton magnetic resonance spectroscopy, 2299

Harmon M.E. see Wiersma G.B. 2631

Hasan S.K. see Misra M. 259

Haslam S.M. Sources of watercourse pollution in Italy and Mediterranean France, assessed by macrophytes, 331

Hassett J.P. see Melcer M.E. 1115

Hattauer-Frey H.A. see Travis C.C. 2331

Hattori R see Kuroki H. 1641

Hauchulz G see Thoma H. 297, 277, 1579

Hay D.J., Finkelstein A., Klicius R. and Bridle T. The national incinerator testing and evaluation program air pollution control technology, 1923

Heindl A. and Hutzinger O. Search for industrial sources of

PCDD/PCDF III. Short-chain chlorinated hydrocarbons, 1949

Hellou J., Bencub J.H. and Hodder H.J. Synthesis and  $^{13}C$  NMR analysis of some xenobiotic conjugates, 1381

Hemming J see Hoff R.M. 6

Hempel L. The "Mediterraneanization" of the climate in Mediterranean Countries - a cause of the unstable ecosubsidy, 313

Henley M.V. see Edgerton S.A. 1475

Hermann J.L.M. see Denner J.W. 2365

Hermann M see Kotzias D. 1463, see Parlar H. 19

Hermann M., Kotzias D. and Krotz F. Photoactivity of humic acids in natural waters, 523

Heykants J.J.P. see Van Leeuwen L.J.J. 1281

Hirakawa M., Takizawa Y., Masuda Y., Takeshita R., Yamane K., Tanaka M., Watanabe Y. and Morikawa K. Investigation on generation of dioxins and related compounds from municipal incinerator in Japan, 1901

Hirayama T see Kurotsune M. 2085, see Nagayama J. 2073

Hjorth J see Stangl H. 1405

Ho K.C. see Chou S.S. 1835

Hocenski V see Pierer M. 2279

Hochschwendner K see Anderson C. 2567

Hodder H.J. see Hellou J. 1381

Hoff R.M., Chan K.-W., Hemming J., Neunanen M., Holmboe B. and Kromberg L. Erratum, 6

Hoffman R see Stehr-Green P. 2089

Hognes J see Scully F.E., Jr. 681

Holcombe M see Jones D. 1743

Holler J. see Patterson D.G., Jr. 935

Holm H.W. see Kolling H.P. 49

Holm L.-E. see Wiklund K. 2107

Holmboe B. see Hoff R.M. 6

Horvat M. see Dernelj M. 877

Hustert K. see Kotzias D. 505

Hustert K., Kotzias D. and Korte F. Photokatalytische abbau von chlornitrobenzolen an TiO<sub>2</sub> in wässriger phase, 809

Huttinger O. see Choudhury G.G. 495, see Heindl A. 1949, see Parsons J.R. 1361, see Reischl A. 2647, see Schramm K.-W. 2653, see Thoma H. 297, 1579, 1353, 277

Hutzingher O. and Thoma H. Polybrominated dibenz-p-dioxins and dibenzofurans: the flame retardant issue, 1877

Ikeda M. see Kurotsune M. 2085, see Nagayama J. 2073

Ikkink H.G.K. see Dueck Th. A. 1021

Isaacs S see Needham L.L. 2027

Ito A. see Suzuki J. 1289

Ito H. see Morita M. 1959

Ito K. see Kaise T. 91

Ito T. see Yokouchi Y. 1143

Ivie W. see Jones D. 1743

Jain S.K. and Sushela A.K. Effect of sodium fluoride - on erythrocyte membrane function - with reference to metal ion transport in rabbits, 1087

Janicki K., Dobrowski and Kraśnicki K. Correlation between contamination of the rural environment with mercury and occurrence of leukaemia in men and cattle, 253

Jansson B. see Haglund P. 2441, see Sellström U. 945

Jansson B., Asplund L. and Olsson M. PCDD/PCDF III. Short-chain chlorinated hydrocarbons, 1949

Jarwojńska-Wolńska J see Pollo I. 537

Jebens A see Benestad C. 813

Jeftic L. see Civili F.S. 633

Jones D., Safe S., Morcom E., Holcombe M., Coppel C. and Ivie W. Bioavailability of tritiated 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) administered to Holstein dairy cows, 1743

Jones K.H., Walsh J., Alston D. and Weston K.R. The statistical properties of available worldwide MSW combustion dioxin/furan emissions data as they apply to the conduct of risk assessments, 2183

Junk G.A. and Richard J.J. Solid phase extraction, GC separation and EC detection of tributyltin chloride, 61

Juvonen B see Paasivirta J. 1787

Kagan E.D. see Kagan J. 2291

Kagan J. see Bennett W.E. 5

Kagan J., Stokes A., Gong H.-H. and Tuveson R.W. Light-dependent cytotoxicity of fluoranthene: oxygen-dependent membrane damage, 2417

Kagan J. Phenylethyltruyne: occurrence, synthesis, biological properties, and environmental concerns, 2405

Kagan J., Simott D. and Kagan E.D. The toxicity of pyrene in the fish *Pimephales promelas*: synergism by piperylene butoxide and by ultraviolet light, 2291

Kaise T. see Hananaka K. 2515

Kaise T., Hananaka K. and Tagama S. The formation of trimethylarsine oxide from arsenobetaine by biodegradation with marine microorganisms, 2551

Kaise T., Watanabe S., Ito K., Hananaka K., Tagama S., Hirayama T. and Fukui S. The study of organo-arsenic compounds in fish and alga by exact mass measurement using fast atom bombardment mass spectrometry, 91

Kalantar A.R. Criteria for choosing a least squares procedure to extract parameters from exponential decays, 79

Kalliokoski P. see Vartiainen T. 1489

Kalus W.H., Wünzer R. and Filby W.G. The aqueous sulfate-nitrite system: investigations on the mutagenicity of some known products, 2479

Kamal M., Lay J.P. and Schenckert I. Metabolism of trichlorobiphenyl in different test species, 599

Kamimura H. see Oguri K. 1707

Kannan M. see Tanabe S. 1965

Kannan M., Tanabe S., Wakimoto T. and Tatsukawa R. A simple method for determining non-ortho substituted PCBs in Kanechlor, Aroclors and environmental samples, 1631

Kanno S. see Maeda S. 2249

Kashima Y. see Ono M. 1823

Kashimoto T. see Miyata H. 1817, see Ogaki J. 2047, see Watanabe I. 2389, 849

Kaventis E. see Arvanitoyannis I. 2523

Kawano M. see Watanabe I. 849

Kearney P.C., Muldoon M.C. and Somich C.J. UV-Ozonation of eleven major pesticides as a waste disposal pretreatment, 2321

Kellert M. see Beck H. 1977

Kelley M. see Bannister R. 1687

Keränen P. see Vartiainen T. 1489

Kettrup A. see Hamann R. 527

Koga B. see Safe J. 1723

Khalil M.A.K. see Edgerton S.A. 155

Khalil M.A.K. and Rasmussen R.A. The residence time of trichlorofluoromethane in polyurethane foams: variability, trends and effects of ambient temperature, 759

Khan S.U. and Bélinger A. Formation of bound  $^{14}C$ -tonofen residues in an organic soil and a vegetable crop under field conditions, 167

Kikuchi M. see Ryan J.J. 2017

Kikugawa K. see Kogi K. 2371

Kilpatrick R., Knowelden J. and Martin D. Mortality from soft tissue sarcomas in agricultural workers (1972-1981), 2101

Kiyohara C. see Nagayama J. 2073

Kjellner L.-O. see Rappe C. 1603, 1775

Klein P. see Paasivirta J. 1231

Kleopfer R. see Viswanathan T.S. 869

Klicius R. see Hay D.J. 1923

Knoerr E. see Thoma H. 277

Knowelden J. see Kilpatrick R. 2101

Knutson A. see Stehr-Green P. 2089

Knuutila M. see Paasivirta J. 1231

Knuutinen J. see Paasivirta J. 1231

Kodrif-Smit M. see Smit Z. 2351

Koga N. see Oguri K. 1707, see Yoshimura H. 1695

Kogi K., Beppu M. and Kikugawa K. Nitrogen dioxide-induced damage of erythrocyte membrane, 2371

Kolling H.P., Parrish R.S. and Holm H.W. An estimate of the variability in biotransformation kinetics of xenobiotics in natural waters by Aufwuchs communities, 49

Kopfler F.C. see Basu D.K. 2595

Kort B.R. see Cummings J.B. 2175

Korte F. see Bahadir M. 1311, see Geyer H.J. 239, 887, see Herrmann M. 523, see Hustert K. 809, see Kotzias D. 1463, see Lay J.P. 1527, see Lorenz W. 521, see Scheunert I. 1031, 1521

Kotzias D. see Hermann M. 523, see Hustert K. 809, see Parlar H. 19, see Stangl H. 1405

Kotzias D., Hustert K. and Wieser A. Formation of oxygen species and their reactions with organic chemicals in aqueous solution, 505

Kotzias D. and Parlar H. Opening address - 3rd International Congress on Environmental Pollution and its impact on life in the Mediterranean Region, 31

Kotzias D., Hermann M., Zsolnay A., Beyerle-Pfür R., Parlar H. and Korte F. Photochemical aging of humic substances, 1463

Koulistzis Th. A. see Samaris C. 405

Kraśnicki K. see Janicki K. 253

Kravitz R.A. see Cummings J.B. 2175

Kronberg L. see Hoff R.M. 6

Kruger Chr. see Fürst P. 1983

Kuehl D.W., Cook P.M., Batterman A.R., Lothenbach D. and Butterworth B.C. Bioavailability of polychlorinated dibenz-p-dioxins and dibenzofurans from contaminated Wisconsin river sediment to carp, 667

Kuehl D.W., Cook P.M., Batterman A.R., Lothenbach D. and Butterworth B.C. Erratum, 1372

Kuehl D.W., Cook P.M., Batterman A.R. and Butterworth B.C. Isomer dependent bioavailability of polychlorinated dibenz-p-dioxins and dibenzofurans from municipal incinerator fly ash to carp, 657

Kumar A see Epling G.A. 1013

Kuratsume M., Nakamura Y., Ikeda M. and Hirohata T. Analysis of deaths seen among patients with Yusho - a preliminary report -, 2085

Kuroki H. see Haraguchi K. 2033, 2299

Kuroki H., Haraguchi K. and Masuda Y. Polychlorinated dibenzofuran (PCDF) congeners in the tissues of patients with Yusho and normal Japanese, 2039

Kuroki H., Hattori R., Haraguchi K. and Masuda Y. Synthesis and mass spectral properties of polychlorinated dibenzofuran (PCDF) metabolites, 1641

Kuroki J. see Yoshimura H. 1695

Kuykendall W.B. see Southerland J.H. 2161

Lamason W.H., II see Southerland J.H. 2161

Lamparski L.L. see Nestrick T.J. 777, see Townsend D.I. 1753

Lang R. see Lay J.P. 1527

Laney M. see Chiu C. 1619

Lao R.C. see Chiu C. 1625, 1619

Lapeza C.R. see Patterson D.G., Jr. 935

Laquer F.C. and Manahan S.E. Solution factors affecting the absorption of phenol onto a siltstone, 1431

Lattner A. see Christmann W. 1649, see Rotard W. 1847

Lavanchy M. Valorization of chlorinated residues via high temperature incineration and recovery of H C L and energy, 1929

Lavie B. and Nevo E. The interactive effects of cadmium and mercury pollution on aliozyme polymorphisms in the marine gastropod *Cerithium scabridum*, 543

Lay J.P. see Kamal M. 599

Lay J.P., Müller A., Peichl L., Lang R. and Korte P. Effects of  $\delta$ -BHC (Lindane) on zooplankton under outdoor conditions, 1527

Lay J.P. Influence of chemicals upon plankton in freshwater systems, 581

Leloup S. see Ernst W.H.O. 233

Lemaire J. see Alif A. 2213

Leoncio C. and Pisani A. An evaluative model for lead distribution in roadside ecosystems, 1387

Lester T.W. see Cundy V.A. 989

Levi H.W. Environmental sciences - a challenge for the German National Research Centers, 605

Lewis D. see Ryan J.J. 1989

Li K. see Chiu C. 1619, 1625

Li P.Y.F. see Fielding A.H. 1105

Liljeblad A. see Vartiainen T. 1489

Lindahl G. see Nilsson C.-A. 99

Lindstrom G. see Happe C. 1603

Linnermark N. see Falkengren-Grenz U. 2239

Lizotte R. see Ryan J.J. 1989

Lötter L.H. see van Dyk L.P. 705

Lodenius M., Sepplin A. and Autio S. Leaching of mercury from peat soil, 1215

Lord D.A. see De Kock A.C. 133

Lorenz W. see Bahadir M. 1311

Lorenz W., Bahadir M. and Korte P. Thermolysis of pesticide residues during tobacco smoking, 521

Lores E.M., Moore J.C. and Moody P. Improved silica gel cleanup method for organophosphorus pesticides, 1065

Lothenbach D. see Kuehl D.W. 667,

Lund J. see Andersson O. 1667, see Poellinger L. 1681

Lund J., Nordlund L., Devereux T., Gläumann H. and Gustafsson J.-A. Physicochemical and immunochemical characterization of a binding-protein for PCB methyl sulfones, 1677

Luther M. and Soeder C.J. Some naphthalenesulfonic acids as sulfur sources for the green microalgae, *Scenedesmus obliquus*, 1565

Lytle J.S. see Lytle T.F. 171

Lytle T.F. and Lytle J.S. Lignin residues as tracers of organic waste transport, 171

Haas J.L. see Bennett W.E. 5

MacBride J.A.H. see Barnhart E.R. 2057

Mackay D. and Powers B. Sorption of hydrophobic chemicals from water: a hypothesis for the mechanism of the particle concentration effect, 745

Magde J.A. see Safe S. 1723

Madhu Y.A. and Freed V.H. Degradation of the herbicides bromacil, diuron and chloroturon in soil, 1003

Maeda N., Ohya T., Nohjima K. and Kanno S. Formation of cyanide ion or cyanogen chloride through the cleavage of aromatic rings by nitrous acid or chlorine. IX. On the reactions of chlorinated, infrared, carboxylated or methylated benzene derivatives with hypochlorous acid in the presence of ammonium, 2249

Maggard L.A., Brown K.W. and Donnelly K.C. The efficiency of two standardized procedures for extracting mutagenic chemicals from soils, 1243

Mahdyou F. see Flatau G.N. 2623

Manahan S.E. see Laquer F.C. 1431

Mann P. see Christmann W. 1649, see Rotard W. 1847

Manninen P. see Hässinen E. 969

Mano S. see Oehme M. 143

Mansouri P. see Méallier P. 513

Mantoura R.F.C. see Vowles P.D. 109

Marklund S. see Rappe C. 1603, see Tykkilind M. 1937

Marklund S., Rappe C., Tykkilind M. and Egebäck K.-E. Identification of polychlorinated dibenzofurans and dioxins in exhausts from cars run on leaded gasoline, 29

Martin D. see Kilpatrick R. 2101

Martin M.H. see Allus M.A. 929

Martinez J. see Paredes M.J. 1557

Masero B.E. see Bargagli R. 3

Mason C.F. A survey of mercury, lead and cadmium in muscle of British freshwater fish, 301

Mason G. see Romkes M. 1719, see Safe S. 1723

Mason G., Denomme M.A., Safe S. and Safe L. Polychlorinated and chlorinated dibenz-p-dioxins: synthesis, biological and toxic effects and structure-activity relationships, 1729

Masse R. and Pelletier B. Photochemistry of dibenz-p-dioxin in organic solvents at 253.7 NM: GC/MS characterization of the phototransformation products, 7

Masuda Y. see Haraguchi K. 2033, 2299, see Hirakawa M. 1901, see Kuroki H. 2039, 1641, see Ryan J.J. 2017

Mathar W. see Beck H. 1977

Matis K. see Zouboulis A.I. 623

Matsuamoto T. see Hanacka K. 2545

Matsushita H. see Asada S. 1907

McBride A.C. The USEPA National dioxin study - tiers 3, 5, 6, and 7, 2169

McElroy A.E., Tripp B.W., Farrington J.W. and Teal J.M. Biogeochemistry of benz(a)-anthracene at the sediment-water interface, 2429

McKinnon H.S. see Waddell D.S. 1655

McLaren E.A. see Bond G.G. 2117

McVicar W. see Epling G.A. 1013

Méallier P., Pouyet B. and Périchet G. Interaction entre adjuvants d'efficacité et matières actives sous rayonnement lumineux, 269

Méallier P., Percherancier J.P. and Mansouri P. Photochemistry of bis phenyl carbamates in aqueous solutions, 513

Méallier P. see Tälliandier G. 1347

Meemken H.-A. see Fürst P. 1983

Melcer M.E., Zalewski M.S., Brisk M.A. and Hassett J.P. Evidence for a charge-transfer interaction between dissolved humic materials and organic molecules: I. Study of the binding interaction between humic materials and chloranil, 1115

Menz W. and Neu H.-J. The application of headspace gas chromatography to the monitoring of organic substances in industrial effluent, 469

Metzger M. and Braun H. In-situ mercury speciation in flue gas by liquid and solid sorption systems, 82

Meulendijks W.E.G. see Van Leemput L.J.J. 1281

Mikalsen A. see Oehme M. 143

Miles A. see Southerland J.H. 2161

Minero C. see Barbeni M. 2225

Ming Y.-F. and Wanhoff H. Photochemistry of pesticides and herbicides, 11. Photolysis of 2,3-dihydro-5,6-dimethyl-1,4-dithiin-1,1,4,4-tetroxide (Harvadine), 1319

Misra M., Athar M., Chandra S., Hasan S.K. and Srivastava R.C. Pharmacokinetics and metabolic disposition of nickel in poisoned rats - effect of chelating drugs, 259

Mitchell W.R. Microbial degradation of guanidinium ion, 1071

Mitchum R.K. see Munslow W.D. 1661, see Sovocool G.W. 221

Mitchum R.K. Environmental levels and fate of dioxins and furans, 2193

Miyata H., Takayama K., Ogaki J., Kashimoto T. and Fukushima S. Monitoring of PCDDs in Osaka Bay using blue mussel, 1817

Modig S. see Aslander O. 1911

Montalvo-Sánchez M. see García-Perejil M.P. 2627

Moody P. see Lores E.M. 1065

Moore J.C. see Lores E.M. 1065

Morcom E. see Jones D. 1743

Morello M. see Barbeni M. 1165

Moren P. see Paredes M.J. 1557

Mori A. see Takenaka S. 1419

Morikawa K. see Hirakawa M. 1901

Morita M. see Asada S. 1907, see Yasuhara A. 2559

Morita M., Yasuhara A., Seki H. and Oh I. Chlorodibenz-p-dioxins in the feral pigeon, 1749

Morita M., Yasuhara A. and Ito H. Isomer specific determination of polychlorinated dibenz-p-dioxins and dibenzofurans in incinerator related samples in Japan, 1959

Morse J.S. see Cundy V.A. 989

Mowrer J. and Nordin J. Characterization of halogenated organic acids in flue gases from municipal waste incinerators, 1181

Mück W see Preiss U. 963

Mück W. Risikoabschätzung für Dioxine in der Umwelt, 43

Müller A see Lay J.P. 1527

Münzner R see Kalus W.H. 2479

Muldoon M.T see Kearney P.C. 2321

Mullen J.K.C see van Dyk L.P. 705

Mundy K.J see Eduljee G.H. 1583

Munslow W.D. see Sovocool G.W. 221

Munslow W.D., Sovocool G.W., Donnelly J.R. and Mitcham R.K. Electrophilic bromination of dibenz-p-dioxin, 1661

Muto H see Takizawa Y. 1971

Nagayama J. Some of the recent findings and comments on pharmacokinetics, biochemicals effects and animal toxicology of dioxins and dibenzofurans, 2191

Nakagawa R see Takenaka S. 1419

Nakamura Y. see Kuratsuna M. 2085, see Nagayama J. 2073

Nakano T. see Tsuji M. 1889

Nakano T., Tsuji M. and Okuno T. Level of chlorinated organic compounds in atmosphere, 1781

Nauman C.H. and Schuman J.L. Human exposure estimation for 2,3,7,8-TCDD, 1851

Neal M.W. see Basu D.K. 2595

Needham L.L. see Patterson D.G., Jr. 935

Needham L.L., Patterson D.G., Jr., Alley C.C., Isaacs S., Green V.E., Andrews J., Sampson E.J. and Bagby J.R. Poly-chlorinated dibenzo-p-dioxins and dibenzofurans levels in persons with high and normal levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin, 2027

Nestrick T.J. see Townsend D.I. 1753

Nestrick T.J., Lamparski L.L. and Crummett W.B. Thermolytic surface-reaction of benzene and iron (III) chloride to form chlorinated dibenzo-p-dioxins and dibenzofurans, 777

Neu H.-J. see Merz W. 469

Nevo E see Lavie B. 543

Nicholson W.D. and Abernathy A.R. A method to assess periodic responses of aquatic microecosystems to photosynthetic inhibition, 287

Nickless G see Allus M.A. 929

Nicolin B see Stangl H. 1405

Nielsen P.R. see Bendixen E.L. 1943

Nigg H.W. see Stamper J.H. 1257

Nilsson C.-A., Lindahl R. and Norström A. A new strategy for monitoring exposure to chain-saw exhaust, 99

Nilsson C.-A., Nygren O. and Sikström E. Determination of mancozeb in air. Occupational exposure during its use in control of potato late blight, 2423

Nojima K see Maeda N. 2249

Nordin J see Mowrer J. 1181

Nordlund L see Lund J. 1677

Norström A see Nilsson C.-A. 99

Nygren M see Rappe C. 1603

Nygren O see Nilsson C.-A. 2423

Oberg T. and Bergström J.G.T. Emission and chlorination pattern of PCDD/PCDF predicted from indicator parameters, 1221

Oberacker D.A. see Southerland J.H. 2161

Oehme M., Mano S. and Mikalsen A. Formation and presence of poly-halogenated and polycyclic compounds in the emissions of small and large scale municipal waste incinerators, 143

Okaki J see Miyata H. 1817

Okaki J., Takayama K., Miyata H. and Kashimoto T. Levels of PCDDs and PCDFs in human tissues and various foodstuffs in Japan, 2047

Okuri K., Kamimura H., Koga M. and Yoshihara H. Mechanisms for stimulated fecal excretion of 2,3,4,7,8-pentachlorodibenzofuran in rats by treatment with squalane and liquid paraffin, 1707

Oni G. see Morita M. 1749

Onya T. see Maeda N. 2249

Okuno T. see Nakano T. 1781, see Tsuji M. 1889

Olafsson P.G., Bryan A.M. and Stone W. PCB Congener-specific analysis: a critical evaluation of toxic levels in biota, 2585

Olson R.A. see Cook R.R. 2111

Olasz M. see Jansson B. 2343

Ono M. see Tanabe S. 1965

Ono M., Kashima Y., Wakimoto T. and Tatsukawa R. Daily intake of PCDDs and PCDFs by Japanese through food, 1823

Oppenhuizen A. see Parsons J.R. 1361

Oppenhuizen A. and Voors P.I. Bioconcentration kinetics of 2,4,5-tri- and 3,3',4,4'-tetrachlorobiphenyl and 2,4,5-tri- and 3,3',4,4'-tetrachlorodiphenyl-ether in fish, 2379

Oppenhuizen A. and Voors P.I. Uptake and elimination of poly-chlorinated aromatic ethers by fish: chloroanisoles, 953

Oriss J.T. and Gleay J.P., Jr. The photo-induced toxicity of polycyclic aromatic hydrocarbons to larvae of the fathead minnow (*Pimephales promelas*), 1395

Osborne J. see Clement R.E. 1895

Osman M.M. see Dorgham M.M. 559

Osman M.M. and Dorgham M.M. Environmental conditions in Abu Kir Bay, east of Alexandria I. Physico-chemical characteristics and water circulation, 361

Ott M.G. see Cook R.R. 2111

Ottobrini G see Stangl H. 1405

Ouzounis K. and Sotiriou N. Ecological parameter of surface water in Northeastern Greece, 351

Ozyavcic V see Clement R.E. 1895

Paasivirta J., Tarkkanen J., Juvonen B. and Vuorinen P. Dioxins and related aromatic chloroethers in Baltic wildlife, 1787

Palauschek N. and Scholz B. Destruction of polychlorinated dibenzo-p-dioxins and dibenzofurans in contaminated water samples using ozone, 1857

Panetso F see Ratti S.P. 1765

Papachristou E., Tsitsikouli R. and Kabakalis B. Boron levels in some ground waters of Halkidiki (a land at Northern Aegean sea), 419

Paredes M.J., Moreno E., Ramos-Corrienzana A. and Martinez J. Characteristics of soil after pollution with waste waters from olive oil extraction plants, 1557

Parlar H see Barlas H. 519, see Kotzias D. 311, 1463

Parlar H., Gologlu H., Herrmann M. and Kotzias D. Die Rolle der Peroxyradikale bei der Photo-induzierten Umwandlung der Diphenylhydrazonherbiziden in Wässrigen Systemen, 19

Parrish R.S. see Kollig H.P. 49

Parsons J.R., Oppenhuizen A. and Hutzinger O. Influence of membrane permeation on biodegradation kinetics of hydrophobic compounds, 1361

Patterson D.G., Jr. see Barnhart E.R. 2057, see Needham L.L. 2027

Patterson D.G., Jr., Holter J.S., Belser W.L., Boozer E.L., Lapeza C.R. and Needham L.L. Determination of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in human adipose tissue on whole-weight and lipid bases, 935

Paudu R see Paasivirta J. 1231

Pauly J see Deneer J.W. 2365

Périchté G see Méallier P. 269

Pearce R see Astles D.J. 803

Pedersen J.R. see Eklund G. 161

Peischl L see Lay J.P. 1527

Peleg-Olevsky E see Fattal B. 565

Palizzetti E see Barbeni M. 1165, 2225

Pelletier B see Massé R. 7

Percherancier J.P. see Méallier P. 513

Pereira W.E. see Rostad C.E. 2397

Perez M.L. see García-Pareja M.P. 2627

Pfister G see Bahadır M. 1273

Picer M., Hocenski V. and Picer N. Investigation of the production of lipophilic volatile organohalogen materials during laboratory chlorination of some ground water samples from Yugoslavia, 2279

Picer N see Picer M. 2279

Pisani A see Leoncio C. 1387

Piskorska-Pliszczynska J. see Romkes M. 1719, 1691, see Safe S. 1723

Poellinger L. Intracellular, high-affinity binding proteins for chlorinated dioxins and related compounds - a concluding remark, 2187

Poellinger L., Wilhelmsson A., Cuthill S., Lund J., Söderkvist P., Gillner M. and Gustafsson J.-A. Structure and function of the dioxin receptor: a DNA-binding protein similar to steroid hormone receptors, 1681

Pollo I. and Jaroszynska-Wolńska J. A comparative study of kinetics of nitrogen oxide oxidation by ozone and oxygen, 537

Pool G see Chiu C. 1619

Pouyet B see Méallier P. 269

Powers B see Mackay D. 745

Pramuoro E see Barbeni M. 1165

Preiss U., Engelhardt G., Wallnöfer P.R. and Mücke W. Degradation of veratrylglycerol-8-(pentachlorophenyl)ether, a model compound for lignin bound pentachlorophenol residues, 963

Pritchard P.H., Cripe C.R., Walker W.W., Spain J.C. and Bourquin A.W. Biotic and abiotic degradation rates of methyl parathion in freshwater and estuarine water and sediment samples, 1509

Ramos-Corrienzana A. see Paredes M.J. 1557

Rappe C see Marklund S. 29, see

Tysklind M. 1937

Rappe C., Andersson R., Bergqvist P.-A., Brodbeck C., Hansson M., Kjeller L.-O., Lindström G., Marklund S., Nygren M., Swanson S.E., Tysklind M. and Viberg K. Overview on environmental fate of chlorinated dioxins and dibenzofurans. Sources, levels and isomeric pattern in various matrices, 1603

Rappe C. and Kjeller L.-O. PCDDs and PCDFs in environmental samples air, particulates, sediments and soil, 1775

Rasmussen R.A. see Edgerton S.A. 155, see Khalil M.A.K. 759

Rathbun R.E. and Tai D.Y. Vapor pressures and gas-film coefficients for ketones, 69

Ratti S.P., Belli G., Bertazzoli P.A., Bressi G., Cerlesi S. and Panetos F. TCDD Distribution on all the territory around Seveso; its use in epidemiology and a hint into dynamical models, 1765

Ravanel P. see Taillandier G. 1347

Ravikumar G. see Bakthavathsalam R. 1339

Reigner D. The impact of pollution on the copepod community from the eastern Adriatic coast, 369

Reichert A. see Christmann W. 1649, see Rotard W. 1847

Reischl A. see Schramm K.-W. 2653

Reischl A., Reissinger M. and Hutzinger O. Occurrence and distribution of atmospheric organic micropollutants in coffee needles, 2647

Reiss S. see Christmann W. 1649, see Rotard W. 1847

Reissinger M. see Reischl A. 2647

Reunanen M. see Hoff R.M. 6

Reynolds L. see de Morsier A. 833

Reynolds L., Blok J., de Morsier A., Gerike P., Wellens H. and Bontinck W.J. Evaluation of the toxicity of substances to be assessed for biodegradability, 2259

Richard J. see Junk G.A. 61

Ripe S. see Andersson O. 1667

Romi R. see Focardi S. 2315

Romkes M., Safe S., Mason G., Piskorska-Pliszczynska J. and Fujita T. Binding of substituted aryl hydrocarbons to the Ah receptor - a QSAR analysis, 1719

Romkes M., Piskorska-Pliszczynska J. and Safe S. Role of the Ah receptor in mediating the down regulation of uterine and hepatic estrogen receptor levels in rats, 1591

Rostan C.E. and Pereira W.E. Creosote compounds in snails obtained from Pensacola Bay, Florida, near an onshore hazardous-waste site, 2397

Rotard W. see Christmann W. 1649

Rotard W., Christmann W., Lattner A., Mann W., Reichert A., Reiss S. and Schinz V. Occurrence of PCDD and PCDF in motor oils, refined oils and contaminated soils, 1847

Rühl Ch.-S. see Beck H. 1977

Rubin I.B. see Ma C.Y. 2613

Ryan J.J. see Scheeter A. 2003

Ryan J.J., Lizzette R. and Lewis D. Human tissue levels of PCDDs and PCDFs from a fatal pentachlorophenol poisoning, 1989

Ryan J.J. Rapporteur Section E:

Human tissue levels, 2195

Safe L. see Mason G. 1729, see Waddell D.S. 1655

Safe S. see Bannister R. 1687, 1739, see Farrell K. 1733, see Jones D. 1743, see Mason G. 1729, see Romkes M. 1719, 1691, see Waddell D.S. 1655

Safe S. Determination of 2,3,7,8-TCDD toxic equivalent factors (TEFs): support for the use of the *in vitro* AHH induction assay, 791

Safe S., Mason G., Farrell K., Keys B., Piskorska-Pliszczynska J., Madge J.A. and Chittim B. Validation of *in vitro* bioassays for 2,3,7,8-TCDD equivalents, 1723

Salihoglu I. see Yemenciooglu S. 429

Salihoglu I., Saydam C. and Yilmaz A. Long term impact of dissolved dispersed petroleum hydrocarbons (DDPH) in gulf of Iskenderun, 381

Salihoglu I., Saydam C. and Yemenciooglu S. Two toxicants, mercury and tin in the Gulf of Iskenderun, 445

Samanidou V. see Fytianos K. 455

Samara C. and Koulouzis Th.A. Pre-concentration of heavy metals in natural waters with hydrazones supported on silica-gel, 405

Sampson E. see Needham L.L. 2027

Sanchez-Camposano M. see Sanchez-Martin M.J. 937

Sanchez-Martin M.J. and Sanchez-Camposano M. Absorption of chloridazone by montmorillonite, 937

Santodonato J. see Basu D.K. 2595

Sato T. see Suzuki J. 1289

Saxena J. see Basu D.K. 2595

Saydam C. see Salihoglu I. 381, 445, see Yemenciooglu S. 429

Schau J.L. see Nauman C.H. 1851

Scheeter A. see Constable J.D. 2063, see Ryan J.J. 2017

Scheeter A., Constable J.D., Arghastan S., Tong H. and Gross M.L. Elevated levels of 2,3,7,8-tetrachlorodibenzodioxin in adipose tissue of certain U.S. veterans of the Vietnam war, 1997

Scheeter A. and Gasiewicz T.A. Health hazard assessment of chlorinated dioxins and dibenzofurans contained in human milk, 2147

Scheeter A., Ryan J.J. and Constable J.D. Polychlorinated dibenz-p-dioxin and polychlorinated dibenzofuran levels in human breast milk from Vietnam compared with cow's milk and human breast milk from the North American Continent, 2003

Scheeter A. Risk assessment and standard setting Rapporteur's summary and discussion, 2205

Scheeter A. The Binghamton state office building PCB transformer incident: 1981-1987, 2155

Scheeter A. Transient liver pathology in patients consuming water from a private well contaminated by PCBs from a submersible water pump, 37

Scheeter A., Eichelberger H. and Eisen H. Transmission and scanning electron microscopic characterization of mouse HEPA 1 hepatoma cells after 2,3,7,8-tetrachloro-para-dibenzodioxin treatment, 1713

Scheunert I. see Geyer H.J. 239, 887, see Kamal M. 599

Scheunert I., Vockel D., Schmitz J. and Korte F. Biom mineralization rate of <sup>14</sup>C-labelled organic chemicals in aerobic and anaerobic suspended soil, 1031

Scheunert I., Vockel D., Bahig M.E. and Korte F. Influence of atrazine on the mineralisation of *n*-decadecylbenzene-sulfonate-<sup>14</sup>C in soil, 1521

Schinz V. see Christmann W. 1649, see Rotard W. 1847

Schmitz J. see Scheunert I. 1031

Scholz B. see Palauschek N. 1857

Scholz B. and Engler M. Determination of polychlorinated dibenz-p-dioxins and dibenzofurans in wastes of technical hexachlorocyclohexane, 1829

Schramm K.-W., Neischl A. and Hutzinger O. UNITree. A multimedia compartment model to estimate the fate of lipophilic compounds in plants, 2653

Schramm W. see Stehr-Green P. 2089

Schreiber, R.J., Jr. Missouri dioxin update - 1986, 1869

Schroeder W.H. and Jackson R.A. Environmental measurements with an atmospheric mercury monitor having speciation capabilities, 183

Schwick W. N-(Dichloromethylthio)-phthalimide, a photomutable of folpet, 127

Schwarz H., Chu D., Villeneuve D.C. and Benoit F.M. Synthesis, characterization and chromatographic separation of tetrachlorobenzene-related compounds, 2467

Schwarz H.M. see Astles D.J. 803

Seki F.E., Jr. and Holmgren J. Rate constants for reactions of singlet oxygen with phenols and other compounds in water, 681

Seffar A., Dauphin G. and Boule P. Oxidative photocyclization of 2-biphenylol in dilute aqueous solution, 1205

Seinen W. see Deneer J.W. 2365

Seki H. see Morita M. 1749

Seligman P.F. see Valkirs A.O. 201

Seiström U., Jansson B., Bergman A. and Alberg T. Selective and sensitive analysis of nitro-PAH, 945

Senser D.W. see Cundy V.A. 989

Seppinen A. see Lodenius M. 1215

Serpone N. see Barbeni M. 1165, 2225

Shane L.A. see Bush B. 733

Shekiro J.M., Jr., Skogerbøe R.K. and Taylor H.E. Crude oil identification with electrothermal vaporization - multiple wavelength absorption spectrometry, 983

Shigeoka T. see Yoshida K. 2531

Shuval H.I. see Fattal B. 565

Sielken R.L., Jr. Statistical evaluation reflecting the skewness in the distribution of TCDD levels in human adipose tissue, 2135

Sjöström E. see Nilsson C.-A. 2423

Sinke M. see van den Berg M. 1193

Sinnige T.L. see Deneer J.W. 2365

Sinnott D. see Kagan J. 2291

Skogerbøe R.K. see Shekiro J.M., Jr. 983

Skowronski B.J. see Sobel W. 2095

Smit Z., Drevendkar V. and Kodrić-Smit M. Polychlorinated diphenyls in the Kupa river, Croatia, Yugoslavia, 2351

Smith A. and Colquhoun K.O. Biodegradability of hexamethylenetetramine, 1555

Söderqvist P. see Poellinger L. 1681

Sobel W., Bond G.G., Skowronski

B.J., Brownson P.J. and Cook R.R. A soft tissue sarcoma case control study in a large multi-chemical manufacturing facility, 2095

Soeder C.J. see Luther M. 1565

Soldewilla M see Cabrera F. 463

Smich C.J. see Kearney P.C. 2321

Sotiriou N see Cuzonius K. 351

Southland J.H., Kuykendal W.B., Lawson W.H., III, Miles A. and Oberacker D.A. "Assessment of combustion sources as emitters of chlorinated dioxin compounds: a report on the results of tier 4 of the national dioxin strategy," 2161

Sovocool G.W. see Munslow W.D. 1661

Sovocool G.W., Munslow W.D., Donnelly J.H. and Mitcham R.K. Electro-philic bromination of dibenzofuran, 221

Spain J.C. see Pritchard P.H. 1509

Sevastava R.C. see Misra M. 259

Staake J. see Stehr-Green P. 2089

Stamper J.H., Nigg H.W. and Queen R.M. Dislodgable captan residues at Florida strawberry farms, 1257

Stangl H., Kotzias D., Van Eljk J., Nicollin B., Hjorth J. and Ottobrini G. On the use of teflon bags for photochemical experiments, 1405

Stanker L., Watkins B., Vanderlaan M. and Budde W.L. Development of an immunoassay for chlorinated dioxins based on a monoclonal antibody and an enzyme linked immunosorbent assay (ELISA), 1635

Steyer J. and Wierich P. Properties of aminotris(methylene-phosphonate) affecting its environmental fate: degradability, sludge absorption, mobility in soils and bioconcentration, 1323

Steppen P. see Dermel M. 877

Stehr-Green P., Hoffmann R., Webb K., Evans R.G., Knutson A., Schramm W., Staake J., Gibson B. and Steinberg K. Health effects of long-term exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin, 2089

Steinberg K. see Stehr-Green P. 2089

Stiegler L. and Vogg H. On formation conditions of PCDD/PCDF in fly ash from municipal waste incinerators, 1917

Stokes A. see Kagan J. 2417

Stone W. see Olafsson P. 2585

Stoss F.W. see Basu D.K. 2595

Strömberg B. see Eklund G. 161

Sturm R. see Eder G. 2487

Subramanian A. see Tanabe S. 1965

Suisa S. see Abenhal M. 2129

Sun W.-F. see Worobey B.L. 1457

Susheela A.K. see Jain S.K. 1087

Suskind R.R. Report on Section F - morning. Session: Observations in man, 2201

Suzuki J., Haggio T. and Suzuki S. Formation of 1-nitropyrene by photolysis of pyrene in water containing nitrite ion, 859

Suzuki J., Sato T., Ito A. and Suzuki S. Photochemical reaction of biphenyl in water containing nitrite or nitrate ion, 1289

Suzuki S. see Suzuki J. 859, 1289

Swanson S.E. see Rappe C. 1603

Sweeney S.A. see Bennett W.E. 5

Suyseen V.E. see Van Leemput L.J.J. 1281

Taillardier G., Tissut M., Ravanel P., Meallier P. and Calmon J.-P. Quantitative relationships between structure and inhibitory activity on photosynthesis in three carbamate series, 1347

Takahashi K. see Takenaka S. 1419

Takayama K. see Miyata H. 1817, see Ogaki J. 2047

Takenaka S., Iida T., Fukamachi K., Mori A., Nakagawa R., Takahashi K. and Asahi M. Levels of polychlorinated quaterphenyl congeners in the adipose tissue of normal subjects, 1419

Takenaka R. see Hiraoaka M. 1901, see Tanaka M. 1865

Takizawa M. see Hiraoaka M. 1901

Takizawa Y. and Muto H. PCDDs and PCDFs carried to the human body from the diet, 1971

Takukawa R. see Tanabe S. 1965

Tanabe S. see Kannan N. 1631

Tanabe S., Kannan N., Subramanian A., Watanabe S., Ono M. and Takukawa R. Occurrence and distribution of toxic coplanar PCBs in the biota, 1965

Tanaka M. see Hiraoaka M. 1901

Tanaka M. and Takeshita R. Evaluation of 2,3,7,8-TCDD and PCDDs in fly ash from refuse incinerators, 1865

Tarhanen J. see Paasivirta J. 1787

Tatsumi R. see Kannan N. 1631, see Ono M. 1823, see Watanabe I. 2389, 849

Taylor H.E. see Shekiro J.M., Jr. 983

Teal J.M. see McElroy A.E. 2429

Thaiken C.E. see Young A.L. 1791

Thom H. see Hutzinger O. 1877

Thoma H., Hauschulz G. and Hutzinger O. Chlorine-bromine exchange during pyrolysis of 1,2,3,4-tetrabromodibenzoquin with various chlorine donors, 1579

Thoma H., Hauschulz G., Knorr E. and Hutzinger O. Polybrominated dibenzofurans (PBDF) and dibenzodioxins (PBDD) from the pyrolysis of neat brominated diphenylethers, biphenyls and plastic mixtures of these compounds, 277

Thoma H., Hauschulz G. and Hutzinger O. PVC-Induced chlorine-bromine exchange in the pyrolysis of polybrominated diphenyl ethers, -biphenyls, -dibenzodioxins and dibenzofurans, 297

Thoma H. and Hutzinger O. Pyrolysis and GC/MS-analysis of brominated flame retardants in on-line operation, 1353

Thomas R.S. see Chiu C. 1625

Thorndyke S. see Clement R.E. 1895

Tissut M. see Taillardier G. 1347

Tomkins B.A. see Ma C.Y. 2613

Tong H. see Schechter A. 1997

Tosine H.M. see Clement R.E. 1895

Townsend D.I. see Eduljee G.H. 1841, 1095

Townsend D.I., Lamparski L.L. and Nestruck T.J. Laboratory simulation and potential mechanisms explaining PCDD congener group ratio behavior on particulates from combustion sources, 1753

Travis C.C. and Hattendorf-Frey H.A. Human exposure to 2,3,7,8-TCDD, 2331

Travis C.C., Dennisson J.W. and Arms A.D. The extent of multimedia partitioning of organic chemicals, 117

Tripp B.W. see McElroy A.E. 2429

Tsioutisidou R. see Papachristou E. 1419

Tsuji M. see Nakano T. 1781

Tsuji M., Nakano T. and Okuno T. Measurement of combustion products from liquid PCB waste incinerator, 1889

Tunesi S. and Anderson M.A. Photocatalysis of 3,4-DCB in TiO<sub>2</sub> aqueous suspensions; effects of temperature and light intensity; CIR-FTIR interfacial analysis, 1447

Turk V. Bacteriological contamination of the Eastern part of the Gulf of Trieste (North Adriatic) due to sewage discharge, 551

Tuveson R.W. see Kagan J. 2417

Tveten G. see Benestad C. 813

Tyler C. see Falkengren-Grerup U. 2239

Tysklin M. see Marklund S. 29, see Rappe C. 1603

Tysklin M., Marklund S. and Rappe C. Experiences from the Swedish MSW incinerator, 1937

Valkirs A.O., Davidson B.M. and Seligman P.F. Sublethal growth effects and mortality to marine bivalves from long-term exposure to tributyltin, 201

Van Eljk J. see Stangl H. 1405

Van Leemput L.J.J., Suyseen V.E., Meuldermans W.E.G. and Heykants J.J.P. A laboratory experiment predicting aerial levels of azacanazole following use in wood preservation, 1281

VanDell R.D. and Boggs G.U. Particulate associated partial combustion products of dichlorobenzene, 973

Vanderlaan M. see Stanker L. 1635

Vartiainen T., Lillmäkinen A., Keränen P., Ala-Peljari T. and Kalliokoski P. Effect of permanganate oxidation and chlorination on the mutagenic activity and other quality parameters of artificially recharged ground water processed from humus-rich surface water, 1489

Weijanen A. see Paasivirta J. 1231

Wellhorst N.H. see Baumann R.A. 1123

Wighi M. see Baccelli E. 1373, see Calmari D. 2359

Wighi M. and Calmari D. A triparametric equation to describe QSARs for heterogeneous chemical substances, 1043

Villeneuve D.C. see Astles D.J. 803, see Schwartz H. 2467

Vincenti M. see Barbieri M. 1165

Viswanathan T.S., Weston R.F., Kleopfer R. and Gierthy J.F. The measurement and significance of 1,2,4,5,7,8-hexachloroxanthene in the environment, 869

Vockel D. see Scheunert I. 1521, 1031

Vogg H. see Stiegler L. 1917

Voors P.I. see Oppenhuizen A. 2379, 953

Vougaropoulos A., Fytianos K., Apostolopoulos A. and Goumaridou X. Correlation of some organic pollution factors in water systems in Northern Greece, 395

Vowles P.D. and Mantoura R.F.C. Sediment-water partition coefficients and HPLC retention factors of aromatic hydrocarbons, 109

Wuorinen M. see Paasivirta J. 1231

Wuorinen P. see Paasivirta J. 1787

Wuorinen P.J. see Paasivirta J. 1231

Maern F see Ahlborg U.G. 1701  
 Mahlen M see Bush B. 733  
 Makimoto T see Kannan N. 1631, see  
 One M. 1823  
 Walker W see Pritchard P.H. 1509  
 Wallinöfer P.R see Preiss U. 963, see  
 Zitzelberger W. 1137  
 Walsh J see Jones K.H. 2183  
 Wambach H see Ming Y.-f. 1319  
 Warwan K see Oberg T. 2451  
 Matanabe I., Kashimoto T., Kawano M.  
 and Tatsukawa R. A study of  
 organic bound halogens in human  
 adipose, marine organisms and  
 sediment by neutron activation  
 and gas chromatographic  
 analysis, 849  
 Matanabe I., Kashimoto T. and  
 Tatsukawa R. Polybrominated  
 biphenyl ethers in marine fish,  
 shellfish and river and marine  
 sediments in Japan, 2389  
 Matanabe S see Kaise T. 91, see  
 Tanabe S. 1965  
 Matanabe Y see Hirakawa M. 1901  
 Watkins B see Starker L. 1635  
 Webb K see Stehr-Green P. 2089  
 Webster G.R.B see Choudhry G.G. 495  
 Webster T see Connell P. 2079  
 Weidemann H see Anderson C. 2567  
 Wellens H see de Morsier A. 833, see  
 Reynolds L. 2259  
 Welling L see Paasivirta J. 1231  
 Weston R.F. see Viswanathan  
 T.S. 869  
 Wever H see van den Berg M. 1193  
 Wiberg K see Rapp C. 1603  
 Wierich P see Steber J. 1323  
 Wiersma G.B., Harmon M.E., Baker G.A.  
 and Greene S.E. Elemental com-  
 position of *Hylocomium splendens*  
 H.W. Rainforest, Washington, USA,  
 2631  
 Wieser A see Kotzias D. 505  
 Wiklund K., Holm L.-E. and Dich J.  
 Soft tissue sarcoma risk among  
 agricultural and forestry  
 workers in Sweden, 2107  
 Wilhelmsson A see Poellinger L. 1681  
 Wilmes R see Anderson C. 2567  
 Wittkowski R see Beck H. 1977  
 Wittlinger R. and Ballenschmiter K.  
 Global baseline pollution  
 studies XI: congener specific  
 determination of polychlorinated  
 biphenyls (PCB) and occurrence  
 of alpha- and gamma-hexachloro-  
 cyclohexane (HCH), 4,4'-DDE and  
 4,4'-DDT in continental air,  
 2497  
 Wong G see Clement R.E. 1895  
 Worobey B.L. and Sun W.-F. Isolation  
 and identification of chl-  
 oropham and two of its  
 metabolites in potatoes by GC-  
 MS, 1457  
 Yasuuchi F see Yoshida K. 2531  
 Yasuhara A see Morita M. 1749, 1959  
 Yasuhara A. and Morita M.  
 Identification of volatile  
 organic components in mussel,  
 2559  
 Yemencioğlu S see Salihoglu I. 445  
 Yemencioğlu S., Saydam C. and  
 Salihoglu I. Distribution of tin  
 in the Northeastern  
 Mediterranean, 429  
 Yilmaz A see Salihoglu I. 381  
 Yokouchi Y., Ito T. and Ambe Y.  
 Identification of  $C_6 - C_{15}$   $\gamma$ -  
 lactones in atmospheric  
 aerosols, 1143  
 Yoshida K., Shigeoka T. and Yamashita  
 F. Evaluation of aquatic  
 environmental fate of 2,4,6-  
 trichlorophenol with a  
 mathematical model, 2531  
 Yoshimura H see Oguri K. 1707  
 Yoshimura H., Kuroki J. and Koga  
 M. Unique features of subcellular  
 distribution of 2,3,4,7,8-penta-  
 chlorodibenzofuran in rat liver,  
 1695  
 Young A.L., Cockerham L.G. and  
 Thaiken C.E. A long-term study  
 of ecosystem contamination with  
 2,3,7,8-tetrachlorodibenzo-p-  
 dioxin, 1791  
 Zalewski M.S see Melcer M.E. 1115  
 Ziegler W see Zitzelberger W. 1137  
 Zitzelberger W., Ziegler W. and  
 Wallinöfer P.R. Stereospecificity  
 of the degradation of veratryl-  
 glycerol- $\beta$ -2,4-dichlorophenyl-  
 ether, a model compound for  
 lignin bound xenobiotic residues  
 by *Phanerochaete chrysosporium*,  
*corynebacterium equi* and photo-  
 sensitized riboflavin, 1137  
 Zouboulis A.I. and Matis K.A. Ion  
 flotation in environmental  
 technology, 623  
 Zsolnay A see Kotzias D. 1463  
 Zsolnay A. Spatial and temporal  
 variation of pelagic tar in the  
 Mediterranean sea, 399  
 Zürcher N. and Breitmayer J.-P.  
 Accumulation du mercure par la  
 moule: effet de deux facteurs  
 liés à la chronologie de  
 l'intoxication, 921